



# A DICTIONARY OF SCIENTIFIC TERMS

PRONUNCIATION DERIVATION AND DEFINITION OF  
TERMS IN BIOLOGY BOTANY ZOOLOGY ANATOMY  
CYTOLOGY GENETICS EMBRYOLOGY PHYSIOLOGY

BY

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SIXTH EDITION

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## PREFACE

It was thought desirable that there should be available to students and others interested in the Biological Sciences an up-to-date work somewhat on the lines of Stormonth's *Manual of Scientific Terms* (1879 republished 1903). The subjects selected for treatment are Biology and its allies Botany Zoology Cytology Genetics, Embryology Anatomy Physiology some terms in Bacteriology and Palaeontology are included. Specific, generic, ordinal and other systematic names of plants and animals have necessarily been omitted nor could references to the sources of terms be listed in a volume of moderate size.

After compilation of most of the primary lists and completion of a small number of terms, the work was handed over to I. F. and W. D. Henderson, who prepared the First and Second Editions, and added to the definitions of nearly ten thousand terms those of some fifteen hundred new terms. Further revision was undertaken in the preparation of the Third Edition and a list of abbreviations occurring in biological literature was added. Many definitions were amplified or modified, and the number of terms and cross-references was very considerably augmented in the Fourth Edition and a list of equivalent units of measurement was introduced. The text was again expanded in the Fifth Edition. In the present, Sixth Edition the text has been further revised and extended.

The method of spelling is in the main that used in Britain but due attention is paid to American orthography by means of cross-references or by reproducing in the original lettering terms culled from scientific literature published in the United States. Spelling however is not static, as may be illustrated by the tendency to substitute *e* for the diphthongs *ae* and *oe* and by compound words which may be written as two separate words, or hyphenated or integrated as one word.

In the statement of derivation of terms Greek and Russian words have been transliterated as science and medical students are seldom acquainted with those languages. On the advice



of one authority on Greek the transliteration of certain combinations of letters represents the sound rather than the exact letters of the original hence the occurrence of such words as *brangchia hydor* etc.

Pronunciation upon which there can never be universal agreement, is the least satisfactory portion and is likely to remain so. Quite apart from natural differences in Scottish English, and American utterance pronunciation is subject to different fashions in different centres of learning. Moreover pronunciation is subject to continual fluctuations. In the case of Latin terms, for instance, there is a trend toward the Continental type of pronunciation. The accepted position of the accent also varies in different localities and from one generation to another. Some of the alternative styles of pronunciation given will doubtless be regarded by the purist as faulty or definitely wrong but their inclusion seems justified by the law of common usage.

The accretion of additional terms might have been dealt with in the form of Supplements, but with the generous consent of the Publishers, the work has been reset for each edition in order to retain the facility of reference afforded by an unbroken alphabetical arrangement and to allow of revision, compression, or amplification of the text of the previous edition.

Innumerable publications have been probed for new terms and for new meanings which have been attached to existing terms. Thanks are due to many individuals who during the past thirty six years have furthered the work by suggestions and criticisms. The preparation of each new edition has also been essentially facilitated by the courtesy of the staff of various libraries particularly of the Library of the University of Edinburgh and of the Argyll County Library during preparation of the present edition.

This Dictionary now deals with approximately fourteen thousand terms. However as I. F. Henderson pointed out in the Preface to the Second Edition, a work of this nature must inevitably remain subject to limitations of time and resources.

J. H. K.

## SOUND-SYMBOLS USED IN PRONUNCIATION

The sound-symbols have been made as simple as possible, only the broader differences in vowel-sounds being included. The phonetic spelling following each term represents a general indication of the prevailing varieties of pronunciation rather than a critically exact reproduction as the key words themselves have by no means a universal interpretation.

æ	as in	rate.	ō	as in	no.
ʌ		rat.	ō		not.
ʌ		far	ō		form.
ch		church.	ō		anatomy
ē		he.	oi		toy
ē		hen.	oo		good.
ē		her	ow		cow
g		go.	“		so.
gw		guano.	sh		fish.
l		pine.	th		thin.
l		pin.	ū		pure
j		gem.	ū	“	nut.
k		cat.	y		yard
kw	“	queen.	z	“	maize
ng		sing	zh		vision.



# ABBREVIATIONS

A	androecium	bot.	botanical botany
A	argon	B.P	British Pharmacopoeia
a.	anode	b.p	boiling point
a.	anterior	Br	bromine
a.	abundant (occurrence of species)	B.T U	British thermal unit
a.	adjective	C	carbon
Å	Ångström unit	C.	centigrade Celsius
apom.	amphipomict	C	( <i>centavo</i> ) hundred cen- tury
A.C. a.c.	alternating current	C	corolla
ACTH	adrenocorticotrophic ho- mone	c.	( <i>cent</i> ) approximately
adv	adverb	C.A.	chronological age
acc.	( <i>accidit</i> ) age(d)	Ca	calcium
Ag	silver	ca.	cathode
alt.	alternate	ca.	( <i>circa</i> ) approximately
alt.	altitude	Cal.	large calorie(s)
Al	aluminium	cal.	small calorie( )
Am	ammonium	c.c.	cubic centimetre
amph.	amphimict	Cd	cadmium
anal.	analysis	Ce	cerium
anat.	anatomical, anatomy	Cel.	Celsius
ant.	anterior	cel.	cellulose
APH	anterior pituitary hormone	cent.	hundred centigrade
APL	anterior pituitary-like hor- mone	c.e.s.	central excitatory state
apm.	apomict	c.i.s.	central inhibitory state
appl.	applied to	cf	compare
aq.	water aqueous	cg. cgm.	centigram( )
Ar	Arabic	Cl	chlorine
A.S.	Anglo-Saxon	c.l.	corpus luteum
As	arsenic	cm.	centimetre( )
atm	atmosphere, atmospheric	c.mm.	cubic millimetre(s)
Au	gold	cm/s	centimetres per second
A V	atrioventricular	CO	cardiac output
av	average	Co	cobalt
As	azote (nitrogen)	col. cols	(bacterial) colony colonies
B	boron	conc.	concentrated, concentra- tion
B	<i>Bacillus</i>	conch.	conchology
Ba	barium	C.O V	cross-over value
Bact., bact.	Bacterium, bacterial	cpd.	compound
bar	barometric	cpl.	carpel
Bi	bismuth	C	chromium
B.I.	buffer index	Ca	caesium
biol.	biological, biology	c.s.f.	cerebrospinal fluid
B.M.R.	basal metabolic rate	Cu	copper
B.N.A.	Beale nomina anatomica	cu., cub.	cubic
		D	deuterium

d.	( <i>dexter</i> ) right	G	gynoeceum
<i>d</i>	dextrorotary	g	gram( )
<i>d</i>	dominant ( <i>appl</i> species)	gal.	gallon(s)
D n.	Danish	γ	( <i>gamma</i> ) microgram
db	decibel(s)	gen.	genus
D C	d.c. direct current	geog.	geographical
deg	degree(s)	geol.	geological
dg	decigram( )	Ger	German
diam.	diameter	Gk.	Greek
dil.	dilute	gm.	gram(s)
<i>dim.</i>	diminutive	g mol.	gram-molecule
DNA	deoxyribonucleic acid	G.M.T	Greenwich Mean Time
doz.	dozen	gp.	group
dr	drachm(s) dram(s)	gr	grain(s) gram(s)
Dut.	Dutch	gr n.	Gram-negative
dwt.	pennyweight	gr p	Gram-positive
E	east	GSH	glutathione
E.D	effective dose	gt., gtt.	( <i>gutta</i> ) drop ( <i>guttae</i> ) drops
eff.	effluent, efferent	H	hydrogen
<i>e.g.</i>	( <i>exempli gratia</i> ) for example	H <sup>+</sup>	hydrogen ion concentration
embr	embryological, embryology	Hb	haemoglobin
E.M.F	erythrocyte maturing factor	He	helium
e.m.f.	electromotive force	herb.	herbarium
end.	endosperm	h-f.	high frequency
entom.	entomological, entomology	Hg	mercury
eos	eosinophil	hg	hectogram( )
equiv	equivalent	Hgb	haemoglobi
E.R.S	erythrocyte sedimentation rate	hor	horizontal
esp.	especially	hr hrs	hour hours
est.	estimated, estimation	H W	High Water
η	( <i>eta</i> ) viscosity	hyb	hybrid
<i>et al.</i>	( <i>et alii</i> ) and others	hypoth.	hypothetical
F	flooms	I	iodine
F	Fahrenheit	I	iodine
F	French	<i>ib. ibid.</i>	( <i>ibidem</i> ) in the same place
F <sub>1</sub> , F <sub>2</sub> , etc.	1st, 2nd, etc. filial generation	Icel.	Icelandic
f	femal	ichth.	ichthyology
f	frequent (occurrence of species)	ICSH	interstitial cell-stimulating hormones
F.D	focal distance	<i>id</i>	( <i>id est</i> ) that is
Fe	iron	in.	inch(es)
flr( )	flower( )	inf.	inferio
fm	fathom	infl.	inflorescence
f.p.	freezing point	<i>i.g.</i>	( <i>idem quod</i> ) the same as
FSH	follicle stimulating hormone	ind	iridescent
ft.	foot feet	It.	Italian
fth.	fathom	I U	international unit(s)
fur	furlong	I W	isotopic weight
		J.N.D	just noticeable difference
		K	calyx
		k.	potassium
		ka.	kathode
		KC	kilocycles

kg	kilogram( )	$\mu$	( <i>mw</i> ) micron (0.001 mm.)
km.	kilometre(s)	$\mu$ g	microgram
$\lambda$	( <i>wavelength</i> ) wave length	$\mu$ m	micromicron (0.001 m $\mu$ )
L.	Latin	mV	millivolt(s)
L.	Ligament(um)	myc.	mycology
L., Linn.	Linnaean, Linnaeus	N	nitrogen
l.	litre	N	normal solution
L.	laevorotary	N	north
Lam.	Lamarck	n.	nasal
lat.	latitude	n.	nervus
lb.	pound (weight)	n.	neutral, normal
lf	low frequency	n	haploid number f
LH	luteinizing hormone		chromosomes
Li	Lithium	2n	diploid number
liq	liquid liqeo	n	refractive index
L.L.	Late Latin	n.	noun
log	logarithm	Na	sodium
long	longitude	N	noon
lp	low pressure	n.g.	new genes
L.S.	longitudinal section	Ni	nickel
lt.	low tension	No. no.	number
L.W	Low Water	norm.	normal
M.	Membrana, Musculus	n.p.	normal pressure
M	( <i>mille</i> ) thousand	n.sp.	new species
m.	male	NTP	normal temperature and pressure
m.	metre( )	O	oxygen
m	mile( )	o-	ortho-
m.	minimo( )	e	occasional (occurrence of species)
m.	musculus	obl.	oblique, oblong
ma	meta	O.F	Old French
ma.	milliamphre	O H G	Old High German
Mal.	Malaysian	U	( <i>Osmia</i> ) ohm( )
max.	maximum	opp.	as opposed to opposite
mb.	millibar( )	opt.	optical
M.E.	Middle English	opt.	optimal
micr	microscopic	org	organic
min.	minimum minute( )	rig	original
Mg	magnesium	orn., ornith	ornithology
mg mgm.	milligram( )	Os	osmium
ml.	millilitre( ) ; c.c.	O T	old terminology
M.L.D	minimum lethal dose	ov	ovary
mm.	millimetre(s)	Ox	ozone
m $\mu$	millimicron (0.001 $\mu$ )	oz.	ounce( )
M	manganese	P	perianth
M	molybdenum	P	phosphorus
mo	month	P	precollar
mol.	gram-molecule	p	posterior
mol. wt.	molecular weight	p-	para-
m.p.	melting point	p.a.	per annum
m.p.h.	miles per hour	pal.	palacontology
m.p.s.	metres per second	P, P <sub>2</sub> etc.	1st, 2nd, etc. parental generation
msec.	millisecond e		
m.s.l.	mean sea-level		
M.U	mouse unit		

d.	( <i>dexter</i> ) right	G	gynoecium
<i>d</i>	dextrorotary	g	gram(s)
<i>d</i>	dominant ( <i>appl</i> species)	gal	gallon(s)
Dan.	Danish	$\gamma$	( <i>gamma</i> ) microgram
db	decibel( )	gen.	genus
D.C. d.c.	direct current	geog.	geographical
deg	degree(s)	geol.	geological
dg	decigram( )	Ger	German
diam.	diameter	Gk.	Greek
dil.	dilute	gm.	gram(s)
<i>dim.</i>	diminutive	g-mol.	gram molecule
DNA	deoxyribonucleic acid	G.M.T	Greenwich Mean Time
doz	dozen	gp.	group
dr	drachm( ) dram(s)	gr	grain(s), gram( )
Dut.	Dutch	gr n.	Gram-negative
dwt.	pennyweight	gr p	Gram-positive
E	east	GSH	glutathione
E.D	effective dose	gt., gtt.	( <i>gutta</i> ) drop ( <i>guttas</i> ) drops
eff	effluent, efferent	H	hydrogen
<i>eg</i>	( <i>exempli gratia</i> ) for example	H <sup>+</sup>	hydrogen ion concentration
emb	embryological, embryology	Hb	haemoglobin
E.M.F	erythrocyte maturing factor	He	helium
e.m.f	electromotive force	herb	herbarium
end.	endosperm	h-f	high frequency
entom.	entomological entomology	Hg	mercury
eos	eosinophil	hg	hectogram(s)
equiv	equivalent	Hgb	haemoglobin
E.R.S	erythrocyte sedimentation rate	hor	horizontal
esp	especially	hr hrs	hour hours
est.	estimated, estimation	H.W	High Water
$\eta$	( <i>vis</i> ) viscosity	hyb	hybrid
<i>et al</i>	( <i>et al</i> ) and others	hypoth	hypothetical
F	fluorine	I	incisor
F	Fahrenheit	I	iodine
F	French	<i>ib idid.</i>	( <i>ib idem</i> ) in the same place
F F <sub>0</sub> etc.	1st, 2nd, etc. filial generation	icel.	Icelandic
f	female	ichth.	ichthyology
f	frequent (occurrence of species)	ICSH	interstitial cell-stimulating hormone
F.D	focal distance	<i>id</i>	( <i>id est</i> ) that is
Fe	iron	in.	inch(es)
flr( )	flower( )	inf.	infero
fath	fathom	infl.	inflorescence
f.p.	freezing point	<i>idem quod</i>	( <i>idem quod</i> ) the same as
FSH	follicle stimulating hormone	irid.	iridescent
ft.	foot feet	It	Italian
fth	fathom	I.U	international unit( )
furl	furlong	I.W	isotopic weight
		J.N.D	just noticeable difference
		k	calyx
		k.	potassium
		ka.	cathode
		kC	kilocycles

# ABBREVIATIONS

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TSH	thyroid-stimulating	hor	vert.	vertical
	none		ves.	vesica, vesicle
TSP	thyroid-stimulating	hor	vet.	veterinary
	none of preputiary		vic.	vicinal
U	unk( )		visc.	viscous
U	uranium		vol.	volume
ns.	unsymmetrical		v s.	(vide supra) see above
U.S.P.	United States		vs.	versus
	Pharmacopoeia		W	tungsten
U.V.	ultra-violet		W	west
V	vanadium		w	watt( )
v	vibrio		wh.	white
V	vivron		wk( )	week(s)
	vison		w.l.	wave length, $\lambda$
v	volt( )		wt.	weight
	velocity		x	haploid generation
v	verb		2x	diploid generation
var	variable variety		yd(s).	yard(s)
ven.	vena, vein		yr( )	year( )
Vert.	Vertebrata		Zn	zinc
vert.	vertebra, vertebrate		zool.	zoological zoology





## EQUIVALENTS

- One acre = 4840 square yards = 4046·873 square metres  
 One ångström = 0·0001 micron  
 One are = 119·6033 square yards = 0·02471 are  
 One atmosphere = 14·7 pounds per square inch = 1033 grams per square centimetre  
 One bar = pressure of mercury column of 29·53 inches, one square centimetre in area, in latitude 45  
 One British thermal unit = 251·99 calories  
 One centigram = 0·5432 grain  
 One centimetre = 0·39370 inch  
 One chain = 22 yards = 20·116 metres  
 One cubic centimetre = 0·061 cubic inch  
 One cubic foot = 0·0283 cubic metre  
 One cubic inch = 16·387 cubic centimetres  
 One cubic metre = 1·308 cubic yards  
 One degree centigrad = 0·8 degrees Réaumur = 1·8 degrees F. Fahrenheit  
 One degree Fahrenheit = 0·5556 Centigrade  
 One degree of latitude at the equator = 68·704 statute miles  
 One degree of longitude at the equator = 69·65 statute miles  
 One degree Réaumur = 1·25 degrees Centigrad  
 One drachm = 60 minims  
 One fathom = 6 feet = 1·828767 metres  
 One foot = 12 inches = 30·4801 centimetres  
 One furlong = 10 chains = 201·164 metres  
 One gallon (Imperial) = 1·2 gallons (U.S.A.) = 4·54596 litres  
 One gallon (U.S.A.) = 0·8327 gallon (Imperial) = 3·785 litres  
 One gram (void poise) = 0·0647989 gram  
 One gram = 0·035274 ounce = 15·432356 grains  
 One gram-calorie = 0·003968 British thermal units  
 One hectare = 47·06 acres  
 One hundredweight = 100 pounds = 50·80 kilograms  
 One inch = 2·53995 centimetres  
 One inch (U.S.A.) = 2·5400 centimetres  
 One kilogram = 2·20462 pounds (voidupoise)  
 One kilogram per square centimetre = 14·22 pounds per square inch  
 One kilometre = 0·62137 statute mile  
 One litre = 1·05679 pint (Imperial)  
 One metre = 3·28084 feet = 39·3701 inches  
 One microgram = 0·001 milligram = 0·000 5 grain  
 One micron = 0·001 millimetre = 0·000039 inch  
 One mil = 0·001 inch  
 One mile (nautical) = 1·15 statute miles = 1·8532 kilometres  
 One mile (statute) = 1·6093 kilometres  
 One millibar = 0·001 bar  
 One milligram = 0·015432 grain  
 One millilitre = 0·001 litre  
 One millimetre = 0·03937 inch

0	=	millimicron	=	0.000001	millimetre
One	ml	lm (British)	=	0.03919	cubic centimetre
One	minim (U.S.A.)	=	0.00376	cubic inch	= 0.06161 cubic centimetre
One	ounce (avoirdupois)	=	437.5	grains	= 28.34954 grams
One	ounce (troy)	=	31.1035	grams	
One	pennyweight	=	1.555	grams	
One	pt (Imperial)	=	568.2454	cubic centimetres	
One	pound (voird pois)	=	16	ounces	= 453.59243 grams
One	pound (Troy)	=	5760	grams	= 373.24 grams
One	pound per square inch	=	70.308	grams per square centimetre	
One	quart (Imperial)	=	1.13649	litre	
One	quart (U.S.A.)	=	0.94636	litre	
One	quintal	=	100	kilograms	= 220.4621 pounds
One	rood	=	40	poles	= 10.1168 ares
One	square centimetre	=	154.98	square inch	
One	square foot	=	929.034	square centimetres	
One	square inch	=	6.4516	square centimetres	
One	square kilometre	=	0.3861	square mile	
One	square metre	=	1550	square inches	
One	square mil	=	640	acres	= 3.8998 square kilometres
One	square millimetre	=	0.00155	square inch	
One	square yard	=	0.8361	square metre	
One	stere	=	35.3156	cubic feet	
One	stone	=	6.3503	kilograms	
One	yard	=	0.9144	metre	

Sound velocity (air) mean = 331.7 metres per second

Zero absolute = -459.4 F = -273 C. = -273.15 R.

Zero, centigrade, and Réaumur = +32 F

Zero, Fahrenheit = -17.78 C

# A DICTIONARY OF SCIENTIFIC TERMS

**abactinal** (ábák'tínál) *abákti'nál*) *a.* [L. *ab* from Gk. *aktis* ray]

*Appl.* area of echinoderm body without tube feet and in which madreporite is usually included  
abambulacral antambulacral

**abambulacral** (áb'ambúll'král) *a.* [L. *ab* from *ambulare* to walk.]

Abactinal, *q.v.*

**abapical** (ábáp'ikál) *a.* [L. *ab* from *apex*, summit.] *Part* or situated at lower pole.

**abaxial** (ábák'siál) *a.* [L. *ab* from *axis* axle.] *Part* that surface of any structure which is remote or turned away from the axis; *ex* centric. *Opp.* *adaxial*.

**axil** (ábák'sil) *a.* [L. *ab* from *axis* axle.] *Appl.* embryo whose axis has not the same direction as axis of seed.

**abbreviated** (ábrev'viltéd) *a.* [L. *ad* to *brevis* short.] Shortened  
curtailed.

**abd men** (ábdō mēn) [L. *abdomen* belly] The belly in vertebrates, part of body containing digestive organs in Arthropoda and certain Polychaeta, posterior part of body in Synscoelidae, part of zoid below thorax.

**bd minal** (ábdōm'inál) *a.* [L. *abdomen* belly] *Part.* abdomen  
*appl.* structures, organs, or parts of organs situated in, on, or closely related to the abdomen.

**abd minal pores**,—singl paired openings leading from coelom to exterior in cyclostomes and certain fishes

**abd minal flex**,—contraction of abdominal wall muscles when skin over side of abdomen is stimulated.

**abd minal regions**,—nine areas into which the abdomen is divided by

two horizontal and two vertical imaginary lines, viz. hypochondriac (2) lumbar (2) inguinal (2) epigastric, umbilical, hypogastric.

**bd minal ribs**,—ossifications occurring in fibrous tissue between skin and muscles of certain reptiles.

**abd minal ring**—one of two openings in fasciae of abdominal muscles through which passes spermatic cord in male, round ligament in female inguinal ring

**abducens** (ábdu'sēns) *a.* [L. *abducere* to lead away] The sixth cranial nerve supplying the rectus externus muscle of the eyeball.

**bd ct** (ábdúkt') *v.* [L. *abducere* led away] To draw way from median axis.

**bductor** (ábdúkt'ús) *a.* [L. *abducere* led away] A muscle that draws limb or part outwards.

**aberrant** (ábér'ant) *a.* [L. *aberrare* to stray] With characteristics not in accordance with type *appl.* species, etc.

**bd ea** (áb'itēns) *v.* [L. *abire* to depart.] Retraction from stimulus voiding reaction. *Opp.* *adience*

**blent** (áb'ent) *v.* [L. *abire* to depart.] Avoiding the source of stimulation. *Opp.* *adient*.

**abiogenesis** (ábíojén'sis) *a.* [Gk. *a*, not *bios* life *genesis* birth] The production of living from non-living matter, spontaneous generation. *Opp.* *biogenesis*.

**abiology** (ábíol'ojí) *a.* [Gk. *a* not *bios* life *logos* discourse.] The study of non living things.

**abjunction** (áb'júngk'shún) *a.* [L. *abjungere* to unyoke.] The delimitation of spores by septa at tip of hypha.

- ablation (āb'laktā abūn) *n.* [L. *ab* from *lactare* to give milk.] Cessation of milk secretion weaning.
- abomasum (ābōmā sūm) *n.* [L. *ab* from *omacrum* paunch.] The third or fourth chamber of stomach of ruminants.
- aboral (ābō'rāl) *a.* [L. *ab* from *os oris* mouth.] Away from, or opposite to, the mouth.
- abortion (ābōr'ashūn) *n.* [L. *abortus* premature birth.] Premature birth arrest of development of an organ.
- abbranchiate (ābrāng'khiā) *a.* [Gk. *a*, without *brangchis*, gills.] Without gills.
- abrupt (ābrūpt) *a.* [L. *abruptus* to break off.] Appearing as if broken, or cut off at extremity.
- abruptly cuneate — having a broad extremity from which point arises, *appl.* leaf.
- abruptly-pinnate — having the main axis of epipodium not winged but bearing number of secondary axes which are winged.
- abscise (ābsir') [L. *abscider* to cut off.] To become separated to fall off as leaves fruit etc.
- absciss (āb'is) *a.* [L. *abscindere* to cut off.] *Appl.* layer of meristematic cells just outside cork layer to whom fall leaves floral parts fruits, and certain branches in due abscission.
- abscission (ābsish'ūn) *n.* [L. *abscindere* to cut off.] The separation of parts.
- absorption (ābsōrp'ashūn) *n.* [L. *absorber* to suck in.] Intussusception of fluid by living cells or tissues passage of nutritive material through living cells.
- abstriction (ābsirik'shū) [L. *abstringer* to cut off.] The process of detaching pores (conidia) by rounding off of tips of sporophores as in mildews abjunction and abscission.
- abterminal (ābtēr'mināl) *a.* [L. *ab* from *terminus* end.] Going from the end inwards.
- abyssal (ābīs'al) [Gk. *abyssos* unfathomed.] *Part* depths of ocean *appl.* organisms or material usually found there abyssal.
- abyssobenthic (ābīs'ōbēn'thik) *a.* [Gk. *abyssos* unfathomed *benthos* depths of sea.] *Part* or found on bottom of ocean at depths exceeding ca. 1000 metres.
- abyssopelagic (ābīs'ōpēlāj'ik) *a.* [Gk. *abyssos* unfathomed *pelagos* sea.] *Part* inhabiting the ocean at depths exceeding ca. 1000 metres, *a* below the bathypelagic zone.
- acanthaceous (ākān'āśūs) *a.* [Gk. *akanthos* thistle.] Prickly bearing prickles, as leaves.
- acantha (ākān'thā) *n.* [Gk. *akanthos*, thorn.] Prickle spinous process.
- canthaceous (ākānthā'sētūs) *a.* [Gk. *akanthos* thorn.] Bearing thorns or prickles.
- acanthin (ākān'thin) *n.* [Gk. *akanthos*, thorn.] Substance forming skeleton of some Radiolaria.
- acanthi = (ākān'thōn) *n.* [Gk. *akanthos* small thorn.] The most prominent point on the anterior nasal spine.
- acanthocarpous (ākān'thōkār'pūs) *a.* [Gk. *akanthos*, thorn *karpos* fruit.] Having fruit covered with spines or prickles.
- acanthocephalo : (ākān'thōkēf'ālūs, -ēf) *a.* [Gk. *akanthos* thorn; *kephale* head.] With hooked proboscis.
- canthocladus (ākān'thōklād'ūs) *a.* [Gk. *akanthos* thorn *klados* branch.] Having spiny branches.
- canthocyst (ākān'thōsist) *n.* [Gk. *akanthos* thorn *hystis* bladder.] A sac containing lateral or reserve stylets in Nematoda.
- acanthoid (ākān'thōid) *a.* [Gk. *akanthos* thorn *eidos* shape.] Resembling spin prickles spiniform.
- canthophore (ākān'thōfō) *n.* [Gk. *akanthos*, thorn *phoros* to bear.] A conical mass, the basis of median stylet in Nematoda.

canthopore (âkân'ibôpô) *n.* [Gk. *akantika* thorn *poros* passage.] A tubular spine in certain Polyzoa.

acanthosphenote (âkân'thôsf'ônô) *s.* [Gk. *akantika*, thorn *sphen* wedge.] *Appl.* echinoid spine made of solid wedges separated by porous tissue.

acanthozoid (âkân'thôzôid) *n.* [Gk. *akantika* thorn *zoön* animal *oides* form.] Tail part of protozoa of cestodes. *Opp.* cystozoid.

acapnia (âkâp'nî) *n.* [Gk. *akapnos* without smoke.] Condition of low carbon dioxide content in blood.

caryote,—akaryote.

caulesc. t. (âkôl'ês'êot) *s.* [Gk. *a* without *haules* stalk.] Having a shortened stem.

cauline (âkô'lin) *s.* [Gk. *a*, without *haules* stalk.] Having no stem *appl.* certain fungi.

accelerator (âkôl'êtrîô) *n.* [L. *accelerare* to hasten.] *Appl.* muscle or nerve which increases rate of action.

acceptor (âkôp'tôr) *n.* [L. *accipere* to accept.] Body or substance which receives and unites with another substance, as in oxidation reduction processes where oxygen acceptor is the substance oxidised hydrogen acceptor the substance reduced.

accessories (âkôd'êtîs) *n.* [L. *accessare* to go to.] A muscle aiding in action of another spinal accessory or eleventh cranial nerve.

accessory bodi *s.*—minute argyrophil particles originating from Golgi substance in spermatocytes chromatoid bodies.

ccessory bud,—an additional axillary bud a bud formed on leaf.

ccessory cells,—see auxiliary cells.

ccessory chromosom *s.*—sex chromosomes.

ccessory food factors,—vitamins.

ccessory glands,—detached portions of glands glands in relation with genital ducts.

ccessory pulmonary organs,—sac-like structures of insects, variously situated, pulsating independently.

acclimation (âk'linâ'shîm) *n.* [L. *ad* to *clima*, climate.] The

habituation of an organism to a different climat or environment.

acclimatisation (âk'linâ'tîzâ'shîm) *n.* [L. *ad* to *clima* climate.] Habituation of a species to a different climate or environment acclimation under human management.

accommodation (âk'ômôdâ'shîm) *n.* [L. *ad* to *accommodatus* fitting.] Adjustment of eye to receive clear images of different objects adaptation of receptors to a different stimulus.

acrescent (âkrês'ênt) *s.* [L. *acrescere* to increase.] *Appl.* plants that continue to grow after flowering, or calyx growing after pollination.

accretion (âkrê'shîm) *n.* [L. *acrescere* to increase.] Growth by external addition of new matter.

accumbent (âkôm'bênt) *s.* [L. *ac* cumbere to lie on.] *Appl.* embryo having cotyledons with edges turned towards radicle, as in Cruciferae.

accumulators (âk'ôm'ulîtôr) *n. pl.* [L. *ad* t. *cumulus* heap.] Plants with a relatively high concentration of certain chemical elements in them.

A-cells,—alpha cells of islets of Langerhans.

acentric (âkên'trîk) *s.* [Gk. *a*, without *centron*, centre.] Having no centromere *appl.* chromosomes and chromosome segments.

acentrous (âkên'trô) *s.* [L. *a*, without *centrum*, centre.] With no vertebral centra, but persistent notochord as certain fishes.

acrophagocyt (âk'êf'âlôphôg'êtî) *n.* [Gk. *a*, without *kephale* head *phagocytis* bladder.] Hydrated stage of certain tapeworms.

acephalous (âk'êf'âlîs'êf-) *s.* [Gk. *a*, without *kephale* head.] Having no structure comparable to head *appl.* some molluscs *appl.* larvae of certain Diptera *appl.* ovary without terminal stigma.

aerate (âs'êrî) *s.* [L. *acer* sharp.] Needle-shaped pointed at one end *appl.* monaxon or axonote spicules.

- acerose** (äs ärs) *a.* [L. *acer* sharp.] Narrow and slender with sharp point, as leaf of pine.
- acervuline** (äsr'vülín) *a.* [L.L. *dim.* of *aceruus* heap] Irregularly heaped together *appl* foraminiferal tests.
- acervulus** (äsr'vülús) *n.* [L.L. *dim.* of *aceruus* heap] A small heap or cluster especially of sporogenous mycelium.
- acervulus cerebri**,—brain sand, *g.s.*
- acetabular**—*perit* acetabulum.
- acetabulum** (äetib'ülüm) *n.* [L. *acetabulum* vinegar-cup.] The cotyloid cavity or socket in pelvic girdle for head of femur in insects cavity of thorax in which leg is inserted cavity in proximal end of spin of articulation with trameleon in echinoids large posterior sucker in leeches suck on arm of cephalopod one of the cotyledons of placenta in ruminants.
- achaetous** (äkt'ús) *a.* [Gk. *a* without *chaete* hair] Without chaeta or bristles.
- achellary** (äkt'älär) *a.* [Gk. *a*, with out *cheilos* lip] Having labellum undeveloped, as some orchids.
- achen** (äkn') *n.* [Gk. *a* not *chaemeis* to gape.] A one-seeded, dry indehiscent fruit achenium.
- Achillis tendon** (äkil'is tén dō) *n.* [Gk. *Achilles* L. *tendo* tendon] The united strong tendon of gastrocnemius and soleus muscles, tendo calcaneus.
- achlamydeous** (äklämid'ús) *a.* [Gk. without *chlamys* cloak] Having neither calyx nor corolla.
- chondroplasia** (äkn dröplä'ia) *n.* [Gk. without *chondrus* cartilage *plasia* moulding] Hereditary dwarfism due to disturbance of ossification the long bones of the limbs and of certain facial bones during development of ateleosis.
- achroacyt** (äkrö äst) *n.* [Gk. *a* not *chr* colour *cytes* hollow] Colourless or lymph cell lymphocyte.
- achroglab** (äkröglob'in) *n.* [Gk. *a*, not *chr* colour *glabos*

sphere.] A colourless respiratory pigment of some tunicates and molluscs.

- achromasia** (äkrö mäsi) *n.* [Gk. *a* not *chroma* colour] Embodiment of chromatin from nucleus of chromosome.
- achromatic** (äkrömät'ik) [Gk. *a* without *chroma*, colour] *Appl* threshold the minimal stimulus inducing sensation of luminosity or brightness of chromatic *appl* neutral colours achromatonic *g.s.*
- achromatin** (äkrö mätin) *n.* [Gk. *a*, without *chroma*, colour] The non-staining ground substance and limm of the nucleus.
- achromatonic** (äkrö mätin'ik) *a.* [Gk. *a* without *chroma* colour] *Perit* achromatin or resembling achromatin in properties.
- achromite**,—centromere, *g.s.*
- achroous** (äkrö'ús) *a.* [Gk. *a*, without *chros* complexion.] Unpigmented colourless.
- aciel** (äst'ikl) *n.* [L. *acicula* small needle] A thorn-shaped scaphocerite as in Paguridae *acicula* a small spine.
- acicular** (äst'ikülär) *a.* [L. *acicula* small needle.] Like a needle in shape sharp-pointed.
- aciculum** (äst'ikülüm) *n.* [L. *acicula*, small needle.] A stiff basal seta in rapidium of Chaetopoda.
- acid-fast**,—remaining stained with aniline dyes on treatment with acids *appl* bacteria.
- acidic** (äsid'ik) *a.* [L. *acidus* sour] *Appl* stains whose colour determinant plays the part of an acid, acting on protoplasm of basic.
- acidophil** (äsid'öfil) *a.* [L. *acidus* sour Gk. *philein* to love.] Oxyphil. *g.s.* growing in acid media.
- aciform** (äst'iförm) *n.* [L. *acus* needle *forma* shape] Needle-shaped.
- cinaciform** (äsin äst'iförm) *a.* [L. *acinaeus* short sword *forma* shape.] Shaped like sabre or scimitar *appl* leaf.
- cinari us** (äsinä'riús) *a.* [L. *acinus* berry] Having globose vesicles, as some algae.

aciform (ásl'ní'förm) *n* [L. *acinus* berry *forma*, shape.] Grape- or berry-shaped *appl.* type of silk gland in spiders.

acinus (ák'ínús) *n* [L. *acinus* berry] One of drupels composing fruit of bramble or raspberry sac like termination of branched gland.

acme (ák'mē) *n*. [Gk. *akme* prime.] The highest point attained or prime, 1 phylogeny and ontogeny of epactae, paracme.

acoel mate (ák'ó'el'mát) *n*. [Gk. *a* without *koilos* hollow] *Appl.* animals not having true coelom

acodomatous acodelous, *q.s.*

acoelous (ák'ó'elús) *n*. [Gk. without *koilos* hollow] *Appl.* vertebrates with flattened centra : acodelomate, *q.s.*

acoudyl *n* (ák'ón dítús) *n*. [Gk. *a* without *koilos* knuckle] Without nodes or joints.

acone (ák'ón) *n*. [Gk. without *konos* cone.] *Appl.* insect compound eye without crystalline or liquid secretion in cone cells.

acoutia (ák'ón'tiá, ák'ón'tiá) *n. pl.* [Gk. *akoutia* small javelin.] Threadlike processes of mesenteric filaments armed with stinging cells, in actinians.

acotyl don (ák'ótí'l'dón) *n*. [Gk. *a*, without *koyleion* a cup-shaped hollow] A plant without cotyledon.

acousti (ák'oo stik) *n*. [Gk. *akouein*, to hear.] *Part.* organs of sense of hearing *appl.* meatus, nerve etc. *part.* science of sound.

acquired character — a modification or permanent structural or functional change effected during the lifetime of the individual organism and induced by use or disuse of particular organ by disease, trauma, or other functional or environmental influences.

acraspedote (ák'rás pédót) *n*. [Gk. without *kraspedon* border] Having no velum.

acroblast (ák'rób'lást) *n*. [Gk. *akros* tip *blastos* bud.] A body in spermatid and which gives rise to acrosome outer layer of mesoblast.

acr bryous (ák'rób rítús) *n*. [Gk. *akros* tip *bryein* to swell.] Growing at the tip only

acrocarpic (ák'rókár'pík) *n*. [Gk. *akros* tip *karpos* fruit.] Having the fructification terminating the axis acrocarpous *appl.* mosses.

acrocentric (ák'ró'sén'trík) *n*. [Gk. *akros* tip *kentron* centre] With centromere at end *appl.* chromosome.

acrodome (ák'rókór'dál) *n*. [Gk. *akros* tip; *chordos* cord] *Appl.* chondrocranial unpaired frontal cartilage in birds.

acrocoracoid (ák'rókór'áikoid) *n*. [Gk. *akros* tip *koraks* crow *eidos* form.] A process at dorsal end of coracoid in birds.

acrocyst (ák'ró'síst) *n*. [Gk. *akros* tip *kystis* bladder] The spherical gelatinous cyst formed by gonophores at maturation of generative cells.

acrodont (ák'ródónt) *n*. [Gk. *akros* tip *odous* tooth.] *Appl.* teeth attached to the summit of parapat bone as in lizards.

acrodrome (ák'ródróm), acrodromous (ák'ród'rómús) *n*. [Gk. *akros* tip *dromos* to run.] *Appl.* leaf with veins converging at its point.

acrogenous (ák'rój'éntús) *n*. [Gk. *akros* tip; *gennan* producing] Increasing in growth at summit or pet.

acrogynous (ák'rój'índús) *n*. [Gk. *akros* tip *gynē* female.] With archogonia arising from apical cell, *appl.* certain liverworts. *Opp.* anacrogynous

acromegaly (ák'rómég'ál) *n*. [Gk. *akros* tip *megalos* great] Gigantism due to excessive activity of part of pituitary gland.

acromial (ák'rómíál) *n*. [Gk. *akros* summit *omos* shoulder] *Part.* acromion, *appl.* artery process, ligament, etc.

acromio-clavicular (ák'rómíók'láv'ík'ílár) *n*. [Gk. *akromion*, shoulder summit L. *claviculus* dim of *clavus* key] *Appl.* ligaments covering joint between acromion and clavicle.



**acromion** (ák'rō'miōn) *n* [Gk. *akros* summit *omeas* shoulder] Ventral prolongation of scapular spine

**acron** (ák'rōn) *n* [Gk. *akros* tip.] Preoral region of insects anterior unsegmented part of young trilobite

**acropetal** (ák'rōp'ētāl) *a*. [Gk. *akros* summit *L. peto* to seek.] Ascending *appl* leaves, flowers, or roots developing successively from an axis so that youngest arise at pex.

**acrophyte** (ák'rōf'it) *n* [Gk. *akros* peak *phylon* plant.] A plant growing at high altitude alpine plant.

**acropodium** (ák'rōpōd'itūm) *n*. [Gk. *akros* tip *podon* foot.] Digitus—fingers or toes of metapodium.

**acrorhagus** (ák'rōrā'gūs) *n*. [Gk. *akros* summit *hag* grape.] A tubercle near the margin of certain Actinaria containing specialised nematocysts.

**acrosarc** (ák'rōsā'rk) *n* [Gk. *akros* summit *sars* flesh.] A pulpy berry resulting from union of ovary and calyx

**acroscopi** (ák'rōsōp'it) *a* [Gk. *akros* tip *skopos* to view] Facing towards the pe *opp* basiscopic.

**acrosome** (ák'rōsōm) *n* [Gk. *akros* tip *soma* body] Body at pex of spermatozoon pical body perforatorium.

**acrospi** (ák'rōsp'ir) *n* [Gk. *akros* tip *spira* something twisted.] The first shoot or sprout being apical at end of germinating seed.

**acrospore** (ák'rōspō) *n*. [Gk. *akros* tip *spora* seed.] The pore at end of a sporophore.

**acroteric** (ák'rōtēr'ik) *a*. [Gk. *akroterion* topmost point.] Part outer most points, as tips of digits, nose, ears, tail.

**crotoni** (ák'rōtō'ik) *a* [Gk. *akros* tip *trone* brace] Having anthe united to it pe with rosetllum acrotonous. *Opp* basitonic.

**acrotrophic** (ák'rōtrōf'ik) *a*. [Gk. *akros* tip *trophos* nourishment.] *Appl* ovarioi having nutritive cells at pex which are joined to

oocytes by nutritive cords telotrophic.

**actinal** (ák'tināl) (ák'tināl) *a*. [Gk. *aktis* ray] *Appl* area of echinoderm body with tube-feet *appl* oral area with tentacles in Actinaria.

**actine** (ák'tin) *n* [Gk. *aktis* ray] A star-shaped spicule.

**actinenchyma** (ák'tinēng'kēmā) *n* [Gk. *aktis* ray *en* in *chein* to pour] Cellular tissue having a stellate appearance.

**actiniform**,—actinoid.

**actinobiology** (ák'tinōb'iolōj'ī) *n*. [Gk. *aktis* ray *bios* life *logos* discourse.] The study of the effects of radiation upon living organisms.

**actinoblast** (ák'tinōblāst) *n* [Gk. *aktis* ray *blastos* bud.] The mother-cell from which a spicule is developed as in Porifera.

**actinocarpos** (ák'tinōkār'pōs) *a*. [Gk. *aktis* ray *karpos* fruit.] *Appl* plants with flowers and fruit radially arranged actinocarpic.

**actinodrome** (ák'tinōdrōm) *a*. [Gk. *aktis* ray *dromos* course.] Veined palmately ctenodromous.

**actinogonidial** (ák'tinōgōn'id'īāl) *a*. [Gk. *aktis* ray *gonos* offspring] Having radially arranged genital organs.

**actinoid** (ák'tinoid) *a*. [Gk. *aktis* ray *eidos* shape.] Rayed star shaped, stellate.

**actinome** (ák'tinōmēr) *n* [Gk. *aktis* ray *meros* part.] A radial segment.

**actinomorphic** (ák'tinōmōrf'ik) *a*. [Gk. *aktis* ray *morphos* shape] Radially symmetrical actinomorphic.

**actinopharynx** (ák'tinōfār'ingks) *n* [Gk. *aktis* ray *pharynx* gullet.] The gullet of a sea-anemone.

**actinost** (ák'tinōst) *n*. [Gk. *aktis* ray *stemon* bone.] Basal bone of fin-rays in teleosts.

**actinostele** (ák'tinōstē'lē) *n*. [Gk. *aktis* ray *stela* pillar] Stele with xylem radiating outwards and forming ridges, as in certain Pteridophyta.

clinostom (k'lin ostōm) *n.* [Gk. *aktis* ray *stoma* mouth.] The mouth of a sea-anemone five-rayed oral aperture of starfish.  
 actinotrichia (k'tinōtrik'iā) *n. plur* [Gk. *aktis* ray *trichis* hair.] Unjointed horny rays at edge of fins in many fishes.  
 actinotrocha (k'tinōtrōkā) *n.* [Gk. *aktis* ray *trochos* wheel.] Free-swimming larval form of Phoronis.  
 actinula (k'tin ūlā) *n.* [Gk. *aktis* ray.] A larval stage in some Hydro-medusae.  
 action syst. *m.*—behaviour pattern.  
 activator (k'tivā'tōr) *n.* [L. *actīvus* active.] A substance which promotes or protects enzyme action substance which stimulates development of any particular embryonic tissue or organ.  
 aculeate (k'ū'lēāt) *a.* [L. *aculeus* prickle.] Having prickles, sharp points, or sting.  
 aculeiform (k'ū'lēfōrm) *a.* [L. *aculeus* prickle *forma*, shape.] Formed like prickles or thorns.  
 aculeus (k'ū'lēs) *n.* [L. *aculeus* prickle.] A prickles growing from bark, as in rose sting hair like projection microtrichium.  
 acuminate (k'ū'mināt) *a.* [L. *acumen*, point.] Drawn out into long point tapering pointed.  
 acuminiferous (k'ū'minif'ērūs) *a.* [L. *acumen* point *ferre* to carry.] Having pointed tubercles.  
 acuminulat (k'ū'min'ŭlāt) *a.* [L. *acuminatus* dim. of *acumen* point.] Having very sharp tapering point.  
 acut (k'ūt) *a.* [L. *acutus* sharpened.] Ending in sharp point temporarily severe not chronic.  
 acyclic (k'ik'lik) *a.* [Gk. *a*, without *kyklos* circle.] *Appl.* flowers with floral leaves arranged in spiral.  
 adamantoblast (ad'amānt'ōblāst) *n.* [Gk. *adamas* diamond *blastos* bud.] Enamel cell ameloblast.  
 ambulacral (ad'ambŭlā'krāl) *a.* [L. *ad* to *ambulare* to walk.] *Appl.* structures adjacent to ambulacral areas in echinoderms.

adaptation (ad'aptā'shūn) *n.* [L. *ad* to *aptare* to fit.] The process by which an organism becomes fitted to its environment a structure or habit fitted for some special environment the fitting of sensations to a point when discomfort ceases adjustment of disturbance of nervous system without involving higher co-ordinating centres.  
 adaxial (ad'āks'āl) *a.* [L. *ad* to *axis* axile.] Turned towards the axis. *Opp.* basial.  
 ad-digital (ad dī'jital) *n.* [L. *ad* to *digitus* finger.] A primary wing quill connected with phalanx of third digit.  
 adduction (ad dāk'shūn) *n.* [L. *ad* to *ducere* to lead.] Movement towards the median axis.  
 adductor (ad dāk'tōr) *n.* [L. *ad* to *ducere* to lead.] A muscle which brings one part towards another.  
 addecidnat (ā dē'sid dāt) *a.* [L. *a* way from *decidere* to fall down.] Not falling or coming way *appl.* evergreens *appl.* placenta.  
 adelocodonic (adē'lōkōdōn'ik) *a.* [Gk. *adelos* concealed *kōdon* bell.] *Appl.* undetached medusome of certain Gymnoblaster, which degenerates after discharging ripe sexual cells. *Opp.* phaneroecodonic.  
 ad i morphi (adē'lōmōr'fik) *a.* [Gk. *adelos* concealed; *morphe*, shape.] Indefinite in form *appl.* crotal cells of peptic glands adelomorphous.  
 d i phycean (adē'lōfī'shēn) *a.* [Gk. *adelos* concealed *phykion* sea weed.] *Appl.* stage or generation of many seaweeds when they appear as prostrate microthallii.  
 adelphogamy (adē'lōfōg'ami) *n.* [Gk. *adelphos* brother *gamos* marriage.] Brother-sister mating as in certain ants.  
 adelphous (adē'lōfūs) *a.* [Gk. *adelphos* brother.] Joined together in bundles, as filaments of stamens of monadelphous, diadelphous.  
 adendritic (ā dēndrī'tik) *a.* [Gk. *a*, not *dendron* tree.] Adendric without dendrites or branches *appl.* cells.

**adendrogila** (ádéndrógil'a) *n.* [Gk. *a* not *dendron* tree *glōsa* glue.] A type of neurogila lacking processes.

**adenine** (ád'énín) *n.* [Gk. *aden* gland] A compound occurring in many cells, hydrolyzed by adenase to hypoxanthine  $C_5H_4N_6$ .

**adenoblast** (ád'énóblast) *n.* [Gk. *aden* gland *blastos* bud.] Embryonic glandular cell.

**adenochelari** (ád'énók'hér'i) *n. pl.* [Gk. *aden* gland *cheir* hand.] Elaborate accessory copulatory organs outgrowths of atrial walls in Turbellaria.

**adenocyte** (ád'énóít) *n.* [Gk. *aden* gland *kyte* hollow] Secretory cell of a gland.

**adenodactyli** (ád'énódák'tíl'i) *n. pl.* [Gk. *aden* gland *daktylos* finger] Adenochem *q.v.*

**adenohypophyse** (ád'énóbipóf'ís) *n.* [Gk. *aden* gland *hypo* under *physis* growth.] The glandular lobe or portions of the pituitary body derived from Rathke pouch.

**adenoid** (ád'énóid) *n.* [Gk. *aden* gland *eides* shape.] Pert or resembling a gland or lymphoid tissue.

**adenophor** (ád'énóf'ór) *n.* [Gk. *aden* gland *phorō* to carry] The stalk of a nectar gland.

**adenophyllus** (ád'énófil'ús) *n.* [Gk. *aden* gland *phyllon* leaf] Bearing glands on leaves.

**adenopodous** (ád'énóp'ódús) *n.* [Gk. *aden*, gland *podus* foot.] Bearing glands on peduncles or petioles.

**adenos** (ád'énós) *n.* [Gk. *aden* gland.] Glandular.

**anostemonous** (ánóstēm'ónós) *n.* [Gk. *aden* gland *stemon* spun thread] Having glands on stamens.

**adequate**—*appl* stimulus which normally acts on given receptor and induces the appropriate sensation.

**adermin**,—vitamin  $B_{12}$ , rat anti-dermatitis factor pyridoxime.

**desmi** (ád'smík) [Gk. *adesmos* unfettered.] *Appl* cyclomorph scales made up of separate lepid-

morph units *f* monodesmic, polydesmic.

**adesmy** (ád'smí) *n.* [Gk. *adesmos* unfettered.] A break or division in an organ usually entire.

**adetopneustic** (ád'ētō ústík) *n.* [Gk. *adestes* free *pnō* to breathe.] Having dermal gills occurring beyond abactinal surface as in certain stelleroids.

**adfrontal** (ád'frón'tál) *n.* [L. *ad* to *frons* forehead.] *Appl* oblique plates beside frons of certain insect larvae.

**adherent** (ád'hē'nt) *n.* [L. *ad* to *haerere* to stick.] Exhibiting adhesion, *q.v.* attached to substratum, *appl* oocysts of polyzoon colony.

**adhesion** (ád'hē'shūn) *n.* [L. *ad* to *haerere* to stick.] Condition of touching without growing together of parts normally separate as between members of different series of floral leaves of cohesion.

**adhesive cells**,—various glandular or specialised cells for purposes of attachment as on tentacles of Ctenophora, on epidermis of Turbellaria, on pedal disc of Hydra.

**adience** (ád'yēns) *n.* [L. *adire* to approach.] Urge advance towards stimulus approaching reaction. *Opp* abience.

**adient** (ád'yént) *n.* [L. *adire* to approach.] Approaching the source of stimulation. *Opp* abient.

**adipocellulose** (ád'ipóts'el'ús) *n.* [L. *adeps* fat *cellula* small cell] Cellulose with a large amount of suberin as in cork tissue.

**dipocyt** (ád'ipóít) *n.* [L. *adeps* fat Gk. *kytos* hollow] One of the cells forming the fat-body in insects.

**dipoleucocyte** (ád'ipóús'kóít, loo-) *n.* [L. *adeps* fat Gk. *leuko* white *kytos* hollow] A leucocyte containing fat droplets or wax in insects.

**dipose** (ád'ipós) *n.* [L. *adeps* fat.] Pert animal fat fatty.

**A-disc**,—doubly refracting or anisotropic band in myofibrillae.

ditus (ád'túts) *n.* [L. *aditus* entrance] Anatomical structure forming approach or entrance to part e.g. to antrum, larynx etc.

adjustor (ád'jú'stór) *n.* [L.L. *ad* + *fastor* to adjust, from L. *ad* to + *fastus* fast.] A muscle connecting stalk and valve in Brachlopoda ganglionic part of reflex rc, connecting receptor and effector

adlacrima (ád'lák'róul) *n.* [L. *ad* + *lacrima* tear] Lacrimal bone of reptiles.

admiriculum (ád'míník'úlm) *n.* [L. *admiriculum* support.] A locomotory spine of certain pupae posterior fibres of linea alba attached to os pubis.

adnasal (ád'nás'il) *n.* [L. *ad* to + *nasus* nose.] A small bone in front of each nasal in certain fishes.

adnat (ád'nát) *n.* [L. *ad* to + *gnatus* born.] Part or designating the condition of being closely attached to side of petiole or stalk as sepals or leaves designating condition of amber with back attached throughout its length : filament, or to its continuation the connective conjoined.

doxus (ád'ók's) *n. plur.* [L. *ad* to + *nectere* to bind.] Structures or parts closely related to an organ extra-embryonic structures as foetal membranes, placenta.

adnexed (ád'néks) *n.* [L. *ad* to + *nectere* to bind.] Reaching to the stem only

adolescentia (ád'ólé'skén'tiá) *n.* [L. *adolescere* to grow p.] Encysted stage between cercaria and metacercaria, in trematodes : metacercaria.

adoral (ád'ó'rál) *n.* [L. *ad* to + *os* mouth.] Near or part mouth

adpressed (ád'pré's) *n.* [L. *ad* to + *pressus* pressed] Closely applied to surface.

adradius (ád'rád'íus) [L. *ad* to + *radius* radius.] I cocenterates, the radius midway between per radius and interradius, a radius of third order

adretal (ád'rek'tál) *n.* [L. *ad* to

retum rectum.] Near or closely connected with rectum.

adrenal (ád'é'nál) *n.* [L. *ad* to + *renes* kidneys.] Situated near kidneys suprarenal, *appl* glands, the endocrines secreting hormones affecting sympathetic nervous system and blood pressure *appl* organs, the suprarenal and interrenal glands, and chromaphil bodies.

adrenalin (ád'rén'alín) *n.* [L. *ad* to + *renes* kidneys.] A hormone obtained from extract of suprarenal medulla adrenalin, adrenin, suprarenin, epinephrin  $C_9H_{15}O_3N$

adrenergic (ád'rén'éj'ík) *n.* [L. *ad* to + *renes* kidneys Gk. *ergon* work.] *Appl* sympathetic nerves, which liberate sympathin or an adrenalin-like principle from their terminations adrenalergic of cholinergic.

adrenocortical (ád'rén'ók'ók'ú'kál) *n.* [L. *ad* to + *renes* kidneys *cortex* bark.] Part or secreted in the adrenal cortex.

adrenocorticotrophic (ád'rén'ók'ók'ú'tróf'ík) *n.* [L. *ad* to + *renes* kidneys *cortex* bark Gk. *trophic* nourishment.] *Appl* hormone secreted by anterior lobe of pituitary gland and which controls activity of adrenal cortex ACTH

adrenotropic (ád'rén'ók'tróp'ík) *n.* [L. *ad* to + *renes* kidneys Gk. *trophe* turn.] Adrenotrophic *appl* a pituitary hormone acting on the adrenal medulla.

adrostral (ád'ró's'trál) *n.* [L. *ad* to + *rostrum* beak.] Near to or closely connected with beak or rostrum.

adsorption (ád'sór'p'shún) *n.* [L. *ad* to + *sorbere* to suck in.] The adhesion of molecules to solid bodies formation of unimolecular surface layer

adtidal (ád'tídál) *n.* [L. *ad* to + A.S. *tid* time.] *Appl* organisms living just below low-tide mark.

adultoid, *appl* nymph having imaginal characters differentiated further than in normal nymph.

aduncate (ädüŋ'käit) *a.* [L. *aduncus* hooked.] Crooked bent the form of a hook.

advent (ädvēnt) *a.* [L. *advenire* to carry to] Advent carrying to an organ.

adventitia (ädvēntish'itā) *n.* [L. *adventitus* extraordinary] External connective tissue layer of blood vessels tunica adventitia.

ad entiti us (ädvēntish'ūs) *a.* [L. *adventitus* extraordinary] Accidental found in an unusual place *appl.* tissues and organs arising in abnormal positions secondary *appl.* dentine.

*a.* cial—acidia

*a.* cidia,—*pl.* of acidium

acidial (äsd'ial) *a.* [L. *acidium* cup.] Pert. acidia, or acetadrum *appl.* primordium.

acidiosorus (äsd'ios'ūs) *n.* [L. *acidium* cup; Gk. *sorus* heap.] A cluster or row of acidiospores.

*a.* cidiospores (äsd'iospōr'z) *n.* *pl.* [L. *acidium* cup Gk. *spheros* seed.] The spores produced in an acidium spring-spores.

acidium (äsd'ium) *n.* [L. *acidium* cup] A cup-shaped structure containing simple sporophores bearing rows of pores cluster-cup of nests.

acidiospores,—acetadiospores, *q.v.*

*a.* cidium,—acetadrum, *q.v.*

edeagus (äd'ägūs) *n.* [Gk. *eidola*, genitalis.] The male intromittent organ of insects also acetadegus

aeithognathous (ä'ithōg'nāthūs) *a.* [Gk. *aeithes* hedge-sparrow *gnathos* jaw] With maxillo-palatines separate, vomers forming a wedge in front and diverging behind *appl.* a type of palat found in Passeres.

aeolian (äli'an) *a.* [L. *Aeolus* god of the winds.] Wind borne *appl.* deposits.

*a.* renchyma (ä'reŋg'kimā) *n.* [Gk. *aer* air *enchyma*, infusion.] Tissue between spore mass and capsule wall in mosses, cortex of submerged roots of certain swamp plant aerating cortical tissue in floating portions of some aquatic plants aerial (ä'r'il) *a.* [L. *aer* air] I

habiting the air *appl.* roots growing above ground *e.g.* from stems of ivy for purposes of climbing also to small bulbs appearing in leaf axils.

aerob (ä'ərb) *n.* [Gk. *aer* air *bios* life.] An aerobic organism, capable of living in presence of oxygen. *Opp.* anaerobe.

aerobi (ä'ərb'ik) *a.* [Gk. *aer* air *bios* life.] Thriving only in presence of oxygen.

aerobiology (ä'ərbiol'ōjī) *n.* [Gk. *aer* air *bios* life; *logos* discourse.] The study of airborne organisms and their distribution biology of aeroplankton.

aerobiosis (ä'ərbios'is) *n.* [Gk. *aer* air *biosis* manner of life.] Existence in presence of oxygen.

*a.* rocyet (ä'ərbist) *n.* [Gk. *aer* air *kystis* bladder] An air vesicle of algae.

aerogelic (ä'ərbjē'ik) *a.* [Gk. *aer* air *gennan* to produce.] Gas-producing *appl.* certain bacteria.

aeromorphosis (ä'ərbōr'fōs'mōr'fō'sis) *n.* [Gk. *aer* air *morphosis* form.] Modification of form structure owing to exposure to air or wind

aerophyte (ä'ərbif) *n.* [Gk. *aer* air *phyton* plant.] A plant growing attached to an aerial portion of another plant epiphyte.

aeroplankton (ä'ərbplāŋk'tōn) *n.* [Gk. *aer* air *plankton* wandering] Living particles drifting in the air as spores, pollen bacteria, etc. also applied to non-living particles.

aerostat (ä'ərbstāt) *n.* [L. *aer* air *stas* to stand.] An air-sac in insect body or in bird bone.

*a.* rostatic (ä'ərbstāt'ik) *a.* [L. *aer* air *stas* to stand.] Pneumatic containing air-spaces.

rotaxis (ä'ərbāk'sis) *n.* [Gk. *aer* air; *taxis* arrangement.] The arrangement of bacteria and other micro-organisms towards or away from oxygen.

aerotropi (ä'ərbtrōp'ik) *a.* [Gk. *aer* air *tropē* turn.] *Appl.* curvature of plant organ towards higher concentration of oxygen.

ae otropism (āērōt rōptum) *n*. [Gk. *aer* air *trope* turn.] Reaction to gases, generally to oxygen.

aesthacyte (ā'sthākt) *n*. [Gk. *aisthesis* sensation *kytos* hollow.] A sensory cell of primitive animals.

aesthesia (ā'sthē'sh) *n*. [Gk. *aisthesis* sensation.] Sensibility sense percept; anesthesia.

aesthetasc (ā'sthētāsk) *n*. [Gk. *aisthetas* perceiver *askhai* to exercise.] An olfactory receptor on antennule of daphnids.

aesthetes (ā'sthētēs) *n. pl.* [Gk. *aisthetas* perceiver.] Sense organs.

ae tival (ā'stīvāl ā'stīvāl) *a*. [L. *aestivus* of summer.] Produced in, or *per* summer.

aestivation (ā'stīvā'shūn) *n*. [L. *aestivus* of summer.] The mode in which different parts of flower are disposed in flower bud; prefloration; torpor during summer as in some animals dormancy during heat and drought period, *opp* hibernation.

aethallium (ā'hā'liūm) *n*. [Gk. *aisthalos* soot.] An aggregation of plasmodia or sporangia to form compound fruit in Mycetozoa or Myxomycetes.

aetiology (ā'etī'ōl) *n*. [Gk. *aithia*, cause *logos* discourse.] The science of causation or origin of causes also etiology.

afferent (ā'fērēt) *a*. [L. *affert* to bring.] Bringing towards *appt* nerves carrying impulses to nervous centres *appt* blood-vessels carrying blood to an organ or set of organs.

flagellar (ā'fāj'ār) *a*. [Gk. *a*, without L. *flagellum* whip.] Without flagellum.

afterbirth (ā'tərbēth) *n*. [A.S. *aefter* behind *beron* to bring forth.] Placenta and foetal membranes expelled after offspring.

afterbrain, —myelencephalon, *q.v.*

aftershaft (ā'tērshāft) *n*. [A.S. *aefter* behind O.E. *scapst* shaft.] A small tuft of down near superior umbilicus of feather.

ageameon (ā'gāmē'on) *n*. [Gk. *a*,

without *gamos* marriage *on* being.] A species comprising only parthenic individuals.

agamete (ā'gāmēt) *n*. [Gk. *a*, without *gamos* spouse.] An amoeba, or germ cell which develops directly without syngamy into an adult.

gametoblast (ā'gāmē'tōblāst) *n*. [Gk. *a* not *gamos* spouse *blastos* bud.] A cytomeere *q.v.* of Caryotropha.

gamic (ā'gām'ik), *a*. [Gk. *a*, with out *gamos* marriage.] Asexual parthenogenetic; cryptogamic agamous.

agamobium (ā'gāmōb'īām) *n*. [Gk. *a* without; *gamos* marriage *bios* life.] The asexual stage in metagenesis the sporophyte.

agamogenesis (ā'gāmōjēn'ēsis) *n*. [Gk. *a*, without *gamos* marriage *genesis* descent.] Asexual reproduction parthenogenesis.

agamogenetic (ā'gāmōjēnēt'ik) *a*. [Gk. *a*, without *gamos* marriage *genesis* descent.] Asexual produced asexually.

agamogony (ā'gāmōg'ōn) *n*. [Gk. *a*, without *gamos* marriage *gonos* generation.] Schizogony or reproduction without sexual process.

agamont (ā'gāmōnt) *n*. [Gk. *a*, without *gamos* marriage; *on* being.] A schizont, or that stage which gives rise to agametes.

agamospices (ā'gāmōspēs'shēz) *n*. [Gk. *a*, without *gamos* marriage L. *species* particular kind.] Species without sexual reproduction, as in parthenogenetic aneuploids.

agamous, —agamic, *q.v.*

agar (ā'ār ā'gār) *n*. [Mal. *agar-agar* sea-wood.] A medium for bacterial and other cultures, prepared from agar-agar gelatinous substance also of dietary utility yielded by red algae.

ag and areon, —hypothesis of Withs that older species occur in more extensive area than that occupied by more recent species.

ageotropic, —apogotropic, *q.v.*

**agglomerate** (äglöm'erät) *a* [L. *ad* to *glomerus* ball.] Clustered as a head of flowers *appl* adhering mass of protozoa, as in agglomeration of trypanosomes.

**agglutinati** *n* (ägl'ootin'äshün) *n* [L. *ad* to *glutinare* to glue.] Th formation of clumps or floccules by pollen bacteria, erythrocytes, spermatozoa, and some protozoa.

**agglutinin** (ägl'oot'inin) *n* [L. *ad* to *glutinare* to glue.] A substance or specific antibody which causes agglutinati *n*

**agglutinogen** (ägl'ootin'öjen) *n*. [L. *ad* to *glutinare* to glue Gk. *gennan* to produce.] Substance or antigen that produces agglutinin.

**aggregate** (ägr'ëpät) *a*. [L. *ad* to *gregere* to collect into a flock.] Formed in cluster *appl* fruit or embryo formed from apocarpous gynoecium of a single flower as raspberry *appl* certain medullary rays *appl* type of silk gland in certain spiders.

**aggregation** (ägr'ëg'äshün) *n*. [L. *ad* to *gregere* to collect.] A grouping or crowding of separate organs movement of protoplasm in tentacle or tendril cells of sensitive plants which causes tentacle or tendril to bend towards the point stimulated.

**aggressin** (ägr'ë's'in) *n*. [L. *aggressus* attacked.] Toxic substance produced by pathogenic organisms, inhibiting defensive reactions of host.

**agglomerular** (äglöm'er'ülär) *a* [Gk. *a*, without L. *glomerulus* to form into a ball] Devoid of glomeruli, as kidney in certain fishes.

**aglossate** (äglös'ät) *n*. [Gk. *a* without *glossa* tongue.] Having no tongue.

**agminat** *d* (äg'minat'ët) *a*. [L. *agmen* herd] Clustered *appl* glands, Peyer patches.

**agnathostomate** (ägnäth'östöm'ät) *a*. [Gk. *a*, without *gnathos* jaw *stoma* mouth.] Having mouth unfurnished with jaws as lamprey gnathous.

**agon** (äg'ö) *n* [Gk. *agon* contest.] The active principle of an enzyme of pherom symplex.

**agonist** (äg'önist) *n*. [Gk. *agonistes* champion.] A prime mover or muscle directly responsible for change in position of a part.

**agranulocyte** (ägrän'ülösh) *n* [Gk. *a* without L. *granulum* small grain Gk. *kytos* hollow] A non-granular or lymphoid leucocyte.

**agrestal** (ägr'ë's'täl) *a*. [L. *agrestis* rural.] *Appl* plants growing on arable land.

**agriotype** (äg'r'iötöp) *n*. [Gk. *agrios* wild *typos* image.] Wild or ancestral type.

**agrostology** (äg'röstöl'öj) *n*. [Gk. *agrostis* grass *logos* discourse.] That part of botany dealing with grasses.

**heliotropism**—**apheliotropism**, *g.s*  
A horizon—the upper or leached, soil layers.

**air bladder** (är'bläd'er) *n*. [L. *aer* air A.S. *blædre* bladder] The swim bladder in fishes hollow dilatation of thallus in bladder wrack.

**air-cell**—thin-walled cavities in ethmoidal labyrinth numerous cavities in mesothel alveoli of lungs air spaces in plant tissue.

**air-pore**,—**stoma**, *g.s* of plants.

**air-sacs**,—spaces filled with air and connected with lungs in birds dilatations of tracheae in many insects sacs representing tracheal system and having hydrostatic function in certain insect larvae.

**air sinuses**,—cavities in frontal ethmoid sphenoid and maxillary bones with passages to nasal cavities.

**asthenic** (ä'stönik'itik) [Gk. *asthē* causing *nastē* depressed] *Appl* curvature of part of plant and induced by diffuse stimulus.

**akanth**—*see* **acanth**  
**akaryocyte**—**akaryot** an erythrocyte

karyot (Akār'Yō) *n* [Gk. *a* without *karyon* nut.] A cell in which nucleoplasm has not collected together to form a nucleus non-nucleated cell, condition present in many protista. *a* Non-nucleated. *kene* —achene.

kinesis (Akīnē'sis) *n* [Gk. *a* not *kinesis* movement.] Absence or arrest of motion.

akinet (Akīnēt) *n* [Gk. *a*, not *kinein* to move.] A resting cell in certain green algae which will later reproduce.

ala (Ā'la, ā'la) *n* [L. *ala*, wing] Any winglike projection or structure lateral petal of papilionaceous flower membranous expansion on some seeds. *Pls* alae

alar (Ā'lar) *a*. [L. *ala* wing] Winglike *part* wings or alae auxiliary *appl* ligaments cartilages etc.

alary (Ā'larī) *a*. [L. *ala*, wing] Winglike *part* wings.

alate (Ā'lat) *a*. [L. *alatus* winged.] Having a wing-like expansion, as of petiole or stem broad lipped, *appl* shells *appl* specular system in Calcares which is sagittal because of inequality of angles winged

albed (Ālbē'dō) *n*. [L. *albus* white] Diffused reflection the ratio of the amount of light reflected by a surface to the amount of incident light mesocarp of hesperidium, *cf* flavedo.

albescant (Ālbēs'ent) *a*. [L. *alber* care to grow white.] Growing whitish.

albicant (Ālbīkīnt) *a*. [L. *albicare*, to grow white.] Tending to become white.

albinism (Ālbīnīzm) *n*. [L. *albus* white.] Absence of pigmentation in animals normally pigmented state of having colourless chromatophores.

alba (Ālbē'no ālb'no) *n*. [Sp. *albus* white from L. *albus*] Any animal with congenital deficiency of pigment in skin hair eyes, etc. plant with colourless chromatophores, due to absence of chloroplasts or undeveloped chromatoplasts.

albugine (ālbūjīn ēā) *n* [L. *albus* white, *gignere* to beget.] Tunica albuginea white, dense connective tissue surrounding testis, ovary corpora cavernosa, spleen, or eye

albumen (ālbū mēn) *n*. [L. *albumen* white of egg] White of egg nutritive material stored in seed.

albumin (ālbū mīn) *n* [L. *albumen* white of egg] One of group of heat-coagulable water-soluble proteins occurring in egg white, blood serum milk, and many animal and vegetable tissues.

albuminoids (ālbū mīnōīd) *n. pl.* [L. *albumen* white of egg Gk. *eidos* form.] Scleroproteins *q v*

albuminous (ālbū mīnōs) *a*. [L. *albumen* white of egg] *Part* containing or of nature of albumen or an albumin.

albuminous cells, — parenchyma cells associated with nerve cells, as in pteridophytes and gymnosperms.

albumum (ālbēr'nūm) *n*. [L. *albus* white.] Sap-wood or spirit-wood soft white substance between inner bark and true wood outer young wood f dicotyledon.

alecithal (Ālē'sīthāl) *a* [Lk *a* without *lekithos* yolk.] With little or no yolk *appl* ova alecithic.

aletoeyt (Ālē'thēt) *n* [Gk. *aletes* wanderer *lytos* hollow] Wanderling cell.

aleurion (ālē rōn) *n* [Gk. *aleuron* flour] *Appl* protein grains found in general protoplasm and used as reserve food-material *appl* layer containing protein, f endosperm in monocotyledons aleurone.

al urespor (ālē rūspō) *n*. [Gk. *aleuron*, flour] A lateral conidium f certain fungous parasites of skin spore or tip early separated from hypha by a septum.

alexin (Ālēk sīn) *n*. [Gk. *alexon* to ward off] A substance in blood serum which combines with an amboceptor to produce lysis alexin complement.

algosis (āljē'sis) [Gk. *algos* sense of pain.] The sense of pain.



**algin** (áljín) *n* [L. *alga* sea weed.] A mucilaginous substance alginic acid obtained from certain algae.

**algoid** (ál god) *a*. [L. *alga* seaweed Gk. *eidos* shape.] *Part* resembling or of the nature of an alga.

**algology** (ál gól'jŏ) *n*. [L. *alga* seaweed Gk. *logos* discourse] The study of algae phycology

**Algonkian** (ál gŏng'kián) *a*. [*Algonquians* tribe of Indians.] *Part* late Proterozoic era.

**alima** (ál'imá) *n*. [Gk. *halimēs* *part* sea.] A larval stage of certain Crustacea.

**alimentary** (ál'imēn'tārī) *a*. [L. *alere* to nourish] *Part* nutritive functions *appl.* system, canal, tract, etc.

**allaphenoid** (ál'fēn'oid) *n*. [L. *ala* wing Gk. *phēn* wedge *eidos* form.] Wing-like portion of spideroid forming part of cranium *ala* temporalis.

**allitrunk** (ál'trŭngk) *n* [L. *ala* wing *truncus* trunk.] Thorax of insect when fused with first segment of abdomen.

**alkaloid** (ál'kál'oid) *n* [Ar *al*, the *qah* ash Gk. *eidos* form.] Basic nitrogenous organic substance with poisonous or medicinal properties as caffeine morphine nicotine strychnine, ptomain etc.

**allæsthetic** (ál'ēsthēt'ik) *a*. [Gk. *allos* other *asthetēs* perceiver] *Appl* characters effective when perceived by other organisms.

**allantochorion** (álán'tók's'ŏn) *n* [Gk. *allos* sausage *chorion* skin.] Foetal membrane formed of outer wall of allantois and the primitive chorion *trōe* chorion.

**allantoid** (álán'toid) *a*. [Gk. *allos* sausage *eidos* form.] Sausage-shaped botuliform.

**allantoin** (álán'tōin) *n* [Gk. *allos* sausage.] The end product of purine metabolism occurring in allantoin fluid and urine of certain mammals  $C_4H_4O_6N_2$

**allantois** (álán'tōis) *n*. [Gk. *allos* sausage.] An embryonic organ,

membranous sac rising from posterior part of alimentary canal in higher vertebrates, and acting as an organ of respiration or nutrition of both.

**allassotonic** (álās'ŏtŏn'ik) *a*. [Gk. *allassein* to change *tonos* strain.] Induced by stimulus *appl* movements of grown plants of oxotonic.

**allel** (álēl') *n*. [Gk. *allos* one another] Allelomorph.

**allelism** (álēl'izm) *n*. [Gk. *allos* one another] The relationship between two alleles; allelomorphism

**alloecatalysis** (ál'ēkátál'ists) *n* [Gk. *allos* one another *katalysis* dissolution.] Allelocatalytic or mutually accelerating retarding effect of contiguous cells *e.g.* acceleration of rate of fission with increase in number of individual protozoa present.

**allomorph** (ál'ēl'mŏrf) *n*. [Gk. *allos* one another *morphe* form.] One of any pair of alternative hereditary characters gene which can occupy the same locus as another gene in a particular chromosome.

**allelopathy** (álēlŏp'ŏthī) *n*. [Gk. *allos* one another *pathos* suffering] The influence effect of one living plant upon another

**allergen** (ál'ējēn) *n* [Gk. *allos* other *ergon* activity *genes* producing] A substance which induces allergy *topen*.

**allergy** (ál'ējŏ) *n*. [Gk. *allos* other *ergon* activity] Changed reactivity on second or subsequent infection or poisoning exaggerated or unusual susceptibility anaphylaxis atopy *q.v.*

**allosesthetic**,—allæsthetic, *q.v.*

**alliacious** (ál'ēsh'ŏs) *a*. [L. *allium* garlic.] *Part* or like garlic *appl.* a class of odours

**alliosis** (ál'ēsh'ŏs'is) *n* [Gk. *allos* other *biosis* manner of life.] Changed reactivity of an organism in changed internal or external environment

**alloecarpy** (al'ókárpt) *n.* [Gk. *allas* other *karpos* fruit.] The production of fruit after cross-fertilisation.

**allochroic** (al'ókro'ík) *a.* [Gk. *allas* other *chromos* colour.] Able to change colour with colour variation.

**allochrone** (al'ókron'ík) *a.* [Gk. *allas* other *chronos* time.] Not contemporary *appl.* species, etc. *Opp.* synchronic.

**allochthonous** (alók'hónús) *a.* [Gk. *allas* other *khōnē* the ground.] Exotic; not aboriginal acquired *Opp.* autochthonous.

**allocortex** (al'ókór'téks) *n.* [Gk. *allas* other *L. cortex* bark.] The primitive cortical area or cortex of olfactory brain *Opp.* isocortex.

**alogamous** (alóg'áms) *a.* [Gk. *allos* other *gamos* marriage.] Reproducing by cross-fertilisation, *Opp.* utogamous.

**alogamy** (alóg'ámf) *n.* [Gk. *allos* other *gamos* marriage.] Cross-fertilisation, *Opp.* autogamy.

**allogen** (al'ójen) *n.* [Gk. *allas* other *gamos* descent.] A recessive allichomorph *Opp.* protogene.

**allogeni** (al'ójen'ík) *a.* [Gk. *allas* other *gamos* descent.] Caused by external factors *Opp.* plant succession *Arr.* allogenes derived from elsewhere, *Opp.* utogenic.

**allogeneous** or **exogeneus**, *Opp.* endogeneus *allogeneic*, *g.*

**alloheteroploid** (al'ókét'érploid) *n.* [Gk. *allos* other *heteros* other *pleios* onefold *eidos* form.] Heteroploid derived from specific liv distinct genomes.

**allogenesis** (al'ójen'ésis) *n.* [Gk. *allos* different *genesis* descent.] The alternation, in life-history of sexual and non-sexual forms alternation of generations.

**allos metron** (al'óiden'étrón) *n.* [Gk. *allos* different *metros* measure.] Measurable change of proportion or intensity of development within species or races, *g.* head, limb, tooth, etc. proportions.

**all kinesals** (al'ókínés'al) *n.* [Gk. *allas* other *kinesis* movement.] Reflex = passive movement involuntary movement.

**all metry** (al'óiden'étri) *n.* [Gk. *allas* other; *metron* measure.] Study of relative growth; change of proportions with increase of size growth rate of a part differing from standard growth rate or from the growth rate of the whole.

**alloparal** (al'ópárléik'róip) *n.* [Gk. *allos* other *paros* beside *lektes* chosen *typos* pattern.] Specimen from the original collection of the sex opposite to that of the holotype and described subsequently.

**allopatri** (al'óplá'trík) *a.* [Gk. *allos* other *patra*, native land.] Having separate and mutually exclusive areas of geographical distribution. *Opp.* sympatric.

**allopelagi** (al'óplá'ík) *a.* [Gk. *allos* other *pelagos* sea.] *Perr.* organisms found at any depth of the sea.

**all plasim** (al'óplásm) *n.* [Gk. *allos* other; *plasma*, mould.] The differentiated portion of cell's substance not forming independent organelles.

**all plasmatic** (al'óplásmá'tík) *a.* [Gk. *allos* other *plasma* mould.] *App.* differentiated portion of cell protoplasm *allopismatic*.

**all plant** (al'óplánt) *n.* [Gk. *allos* other *plantos* formed.] A morphological cell-unit of more than one kind of tissue *Opp.* homoplant.

**allopolyplaid** (al'ópólp'plaid) *n.* [Gk. *allos* other *poly* many *aplan* onefold *eidos* form.] An organism with more than two sets of chromosomes derived from different species by hybridisation.

**allorhizal** (al'ór'tá'íl) *n.* [Gk. *allos* other *rhiza* root.] Having opposed root and shoot poles. *Opp.* homorhizal.

**all-or non** —principle that response to stimulus is either completely effected or is absent, first observed in heart muscle (Bowditch law)

**allosemati** (álosémát'ík) *a.* [Gk *allos* other *soma* sign.] Having markings or coloration limiting warning signs in other usually dangerous species.

**allosomal** (ál'osó'mál) *a.* [Gk *allos* other *soma* body] *Part* allosome *appl* inheritance of characters controlled by genes located in an allosome.

**allosome** (ál'dsóm) *n.* [Gk. *allos* other *soma*, body] A chromosome other than an ordinary or typical one heterochromosome of autosome.

**allostoses** (ál'ósós'sés) *n. plu.* [Gk. *allos* other *osteon* bone.] Bones formed in membrane of autostoses.

**allosynapsis** — **allosyndesis** *g.s.*

**allosyndesis** (ál'ósín'désis) *n.* [Gk. *allos* other *syndesis* binding together] Pairing of homologous chromosomes from opposite parents in a polyploid of autosyndesis.

**allotriploid**, — **amphidiploid** *g.s.*

**allotherm** (ál'óthèrm) *n.* [Gk. *allos* other *therme* heat.] An organism with body temperature dependent on environmental temperature.

**all trophi** (ál'ótró'fik) *a.* [Gk. *allos* other *trophé* nourishment.] Obtaining nourishment from other organisms saprophytic, or saprozoic heterotrophic.

**all tropic** (álotróp'ík) *a.* [Gk. *allos* other *tropé* turn] Exhibiting mutual tropism as between gametes.

**allotyp** (ál'ótip) *n.* [Gk. *allos* other *typos* pattern.] Paratype of the sex opposite to that of the holotype.

**alloygote** (ál'óit'gót) *n.* [Gk. *allos* other *zygos*, yoke.] A homozygote having recessive characters *opp* protozygote.

**alluvial** (ál'úv'ál) *adju.* [L. *alluvus* to wash to] *Part* deposits formed by finely divided material laid down by running water.

**alpha (α) cells**, — **oxyphobic cells** pars glandularis of pituitary gland cells with granules insoluble in alcohol in islet of Langerhans A-cells.

**alpha (α) granules**, — **metachromatic granules** in central region of protoplast, as in blue-green algae.

**alpha (α) tocopherol** — **vitamin E**.

**alsiaceous** (álsín'shús) *a.* [Gk. *alsis* chickweed.] *Appl* polypetalous coroll where intervals occur between petals as in chickweed.

**alteration theory** — explains electromotive forces of nerve and muscle by alterations in chemical composition of tissue at cross-section.

**alternate** (ál'óltér'nál) *a.* [L. *alternus* one after another] Not opposite *appl* leaves branches etc. occurring at different levels successively on opposite sides of stem every other taking turns.

**alternating cleavage** — **spiral cleavage** *g.s.*

**alternation of generations**, — the occurrence in one life-history of two or more different forms differently produced usually an alternation of a sexual with an asexual form allogogenesis metagenesis digenesis heterogamy heterogenesis heterogamy

**alternation of parts**, — general rule that leaves of different whorls alternate in position with each other sepals with petals stamens with petals.

**alternative inheritance** — **allelism** **allelomorphism**.

**altarne** (áltérn'ál) *n.* [L. *alternus* one after another] Vegetation exhibiting disturbed rotation due to abrupt change in environment or to interference with normal plant succession.

**alternipinnate** (áltér'nípín'ál'ál'ál) *a.* [L. *alternus* one after another *pinnus* wing] *Appl* leaflets or pinnae arising alternately on each side of midrib.

**altri es** (áltér'sés, ált'ér'sés) *n. plu.* [L. *altrix* nourisher] Birds whose young are hatched in a very immature condition of precocies.

**altricial** (áltér'shál) *a.* [L. *altrix* nourisher] Requiring care or nursing after hatching or birth.

**alula** (al'ulā) *n.* [*L. alula, dim of ala wing*] A small lobe separated off from wing-base on its posterior edge in certain insects. spurious or bastard wing of birds.

**alutaceous** (ālūt'āshūs) *a.* [*L. alutē, alum-dressed leather*] Tan coloured leathery having appearance of minute cracks, *appl.* markings on elytra of certain beetles.

**alveola** (āl'vetōlā) *n.* [*L. alveolus small cavity*] A pit on the surface of an organ. *alveolus, q.v.*

**alveolar** (āl'vōlār) *a.* [*L. alveolus small pit*] *Part.* an alveolus *part.* tooth socket *appl.* artery nerve process canal, in connection with the jaw-bone *appl.* small cavities in lungs, glands, etc. *appl.* theory of structure of protoplasm.

**alveolat** (āl'vōlāt, ālv'vōlāt) *a.* [*L. alveolatus pitted*] Deeply pitted honey-combed.

**alve lati** *n.* (āl'vetōlā shūn) *n.* [*L. alveolatus pitted*] The formation of alveoli alveolate appearance.

**alveolus** (āl've'tōlūs) *n.* [*L. alveolus small pit*] A small pit or depression tooth socket pyramidal ossicle, supporting tooth in sea urchin air-cell of lung, a cavity in glands cavity in tarsus of spiders, receptacle in bacmatodocha pit to articulation of macrotrichia.

**alvus** (āl'vūs) *n.* [*L. alvus cavity*] A white layer of fibres on ventricular surface of hippocampus utricle of ea dilatation of thoracic duct.

**amacrin** (ām'āk'rīn) *a.* [*Gk. a not macrus long is fibre*] Having no axon *appl.* cells in inner nuclear layer of retina with dendrites in inner plexiform layer

**amb** (āmb) *n.* [*L. ambular to walk*] Ambulacral area.

**ambiens** (ām'bīēns) *n.* [*L. ambire to go round*] A thigh muscle in certain birds, the action of which causes the toes to maintain grasp on perch.

**ambit** (ām'bīēt) *a.* [*L. ambire to go round*] Surrounding *appl.*

vei the costal nervure when encircling insect wing

**ambiparous** (āmbip'ārūs) [*L. ambo both parre to produce*]

Containing the beginnings of both flowers and leaves *appl.* buds.

**ambisexual** (ām'bī'sēk'suāl) [*L. ambo both sexes*] *Part.* both sexes ambosexual monocious, *q.v.*

**ambisporangiate** (ām'bī'spōrānj'īāt) *a.* [*L. ambo both Gk. spores seed angria box*] Amphisporangiate *q.v.*

**ambital** (ām'bītāl) *a.* [*L. ambire to go round*] *Appl.* interambulacral and antambulacral plates of asteroids outer skeleton of ophiuroid arm.

**ambitus** (ām'bītūs) *n.* [*L. ambire to go around*] The outer edge or margin outline of echinoid shell viewed from apical pole.

**amboceptor** (ām'bō'sēp'tōr) *n.* [*L. ambo both capere to take*] A specific antibody or immune body necessary for ferment like action of complement on a toxin or red blood corpuscle a lysin.

**ambon** (ām'bōn) *n.* [*Gk. ambon raised platform*] Fibrocartilaginous ring surrounding an articular socket as around acetabulum circumferential fibrocartilage labrum.

**ambosexual** (ām'bō'sēk'suāl) *a.* [*L. ambo both sexes*] Common to or *part.* both sexes activated by both male and female hormones.

**ambulacra** (ām'būl'āk'rā) *n. plur.* [*L. ambulare to walk*] Locomotor tube-feet of echinodermata.

**ambulacralla** (ām'būl'āk'rālā) *n. plur.* [*L. ambulare to walk*] Ambulacral plates, i.e. plates through which tube feet protrude.

**ambulacriform** (ām'būl'āk'rīfōrm) *a.* [*L. ambulare to walk forma, shape*] Having the form or appearance of ambulacra.

**am ba,—amoeba.**

**ameloeis** (ām'elō'is) *n.* [*Gk. a, with out melosis diminution*] Occurrence of only one division in meiosis instead of two.

**ameiote** (āmēō'tēk) *a.* [Gk. *a.* without *meion* smaller] *Appl* parthenogenesis in which meiosis is suppressed.

**amelification** (āmēl'ifikkā shūn) *n.* [M.E. *amell* enamel L. *facere* to make.] Formation of tooth-enamel.

**am loblast** (āmēl'ōblāst) *n.* [M.E. *amell* enamel Gk. *blastos* bud.] A columnar or hexagonal cell of internal epithelium of enamel organ enamel cell, adamantoblast, ganoblast.

**amentaceous** (āmēntē'āhūs) **amentiferous** (āmēntif'ērūs) *a.* [L. *amentum* thong *ferre* to carry] *Appl* plants bearing amenta or catkins.

**amentum** (āmēn'tūm) *n.* [L. *amentum* thong] A catkin, consisting of bracted axis bearing unisexual flowers, as in poplar and willow ament.

**ameristi** (āmērīstīk) *a.* [Gk. *a.* without *meristos* divided] Not divided into parts unsegmented.

**ametalic** (āmēt'ābō'tēk) *a.* [Gk. *a.* without *metabolē* change.] *Appl* insects that do not pass through marked metamorphosis.

**amicon** (āmīk rōn) *n.* [Gk. *a.* without *meibros* small.] An element so small that even the ultramicroscope can only indicate it as diffuse illumination in the track of the beam of submicron.

**amiconucleate** (āmīk'rōnō'klēt) *a.* [Gk. *a.* without *meibros* small L. *nucleus* kernel.] *Appl* fragments of certain Protozoa in which there is no micronucleus.

**amī** *e* (ām'in) *n.* [Gk. *ammoniakos* resinous gum.] A nitrogen compound formed in plants, also produced by bacterial action on amino acids, derivative from ammonia by hydrogen replacement.

**amī acids**,—compounds containing amino (NH<sub>2</sub>) and carboxyl (COOH) groups, and produced from proteins by hydrolysis.

**amitosis** (āmītō'sis) *n.* [Gk. *a.* without *mitos* thread.] Direct cell-

division and cleavage of nucleus without thread-like formation of nuclear material. *Opp* mitosis.

**ammonitiferous** (ām'ōnif'ērūs) *a.* [Gk. *Ammon* Jupiter L. *ferre* to carry] Containing fossil remains of ammonites.

**amnion** (ām nōn) *n.* [Gk. *amniōn*, foetal membrane.] A foetal membrane of reptiles, birds, and mammals inner embryonic membrane of insects; viscous envelope of certain ovules.

**amniotic**,—**amniotic**.

**amnio** (ām nō) *n.* [Gk. *amniōn* foetal membrane.] An animal characterised by possession of amnion in foetal life.

**amniotic** (āmniō'tēk) *a.* [Gk. *amniōn* foetal membrane.] *Part* amnion *appl* folds sac cavity fluid amniotic.

**amoeba** (āmē'bā) *n.* [Gk. *amoebe* change.] A protozoan in which the shape is subject to constant alterations due to formation and retraction of pseudopodia generally used to typify most primitive animal commonly known.

**amoebadiastase** (āmē'bādī'āstās) *n.* [Gk. *amoebe* change *diastase* through *diastase* to set.] The digestive ferment secreted by amoebae.

**amoebiform** (āmē'bifōrm) *a.* [Gk. *amoebe* change L. *forma*, shape.] Shaped like or resembling an amoeba.

**amoebism** (āmē'bīzm) *n.* [Gk. *amoebe* change.] Amoeboid form or behaviour as of leucocytes.

**amoebocyte** (āmē'bōsīt) *n.* [Gk. *amoebe* change *kytos* hollow] Any cell having the shape or properties of an amoeba one of certain cells in coelom of echinoderms a leucocyte, *q.v.*

**amoeboid** (āmē'bōid) *a.* [Gk. *amoebe* change *eidos* shape.] Resembling an amoeba in shape in properties, or locomotion.

**amoebola** (āmē'bōlā) *n.* [Gk. *amoebe* change.] The swarm-spore of a protist when furnished with pseudopodia pseudopodiospore.

**amorphous** (Amór'fús) *a.* [Gk. *a* without *morphe* shape.] Of indefinite or irregular form with no visible differentiation in structure.

**amphipomict** (ám'fíp'ómíkt) *n.* [Gk. *amphi* both *apo* away *mixto* mixed.] A biotype reproduced from facultative sexual forms.

**amphiarthrosis** (ám'fíáthró'sis) *a.* [Gk. *amphi* both *arthron* joint.] A slightly movable articulation, as symphysis or a syndesmona.

**amphiate** (Am'fíá'té) *n.* [Gk. *amphi* both *aster* star] The two asters connected by the achromatic spindle formed in mitotic cell division.

**amphiatral** (ám'fíá'trál) *a.* [Gk. *amphi* both *aster* star] *Appl* a type of mitosis in which true asters are present at the spindle-poles.

**amphibious** (ám'fí'bí'ús) **amphibian** (ám'fí'bí'án) *a.* [Gk. *amphi* both *bios* life.] Adapted for life either on land or in water covered *par*

**amphiblastic** (ám'fí'bí'á'stík) *a.* [Gk. *amphi* both *blastos* bud.] *Appl* telolecithal ova with complete but unequal segmentation.

**amphiblastula** (ám'fí'bí'á'stúla) *n.* [Gk. *amphi* both *blastos* bud.] Stage in development of certain sponges, in which posterior end of embryo is composed of granular archaeocytes and anterior end of flagellate cells.

**amphiboli** (ám'fí'bó'lík) *a.* [Gk. *amphi* both *bale* throw] Capable of turning backwards or forwards, as outer toe of certain birds.

**amphicarpous** (ám'fí'ká'r'pús) *a.* [Gk. *amphi* both *karpe* fruit.] Producing fruit of two kinds.

**amphicoelous** (ám'fí'sé'lús) *a.* [Gk. *amphi* both *koilos* hollow] Concave on both surfaces *appl*. biconcave vertebral centra **amphicoelous**

**amphicondyl** *as* (ám'fí'kóndí'lís) *a.* [Gk. *amphi* both, *anadylos* knuckle] Having two occipital condyles.

**amphicone** (ám'fí'kón) *n.* [Gk. *amphi* both *konos* cone] Cusp of molar of extinct mammals believed to have evolved into molars and paracune.

**amphicribal**,—**amphiphilic**

**amphicytes** (ám'fí'sítis) *n. pl.* [Gk. *amphi* both *cytes* hollow] Endothelial cell surrounding or forming capsules of cells of a dorsal root ganglion capsule cells.

**amphidelphic** (ám'fí'dé'lík) *a.* [Gk. *amphi* both *delphos* womb] Having a paired uterus, as in certain nematodes **didelphic**.

**amphidetic** (ám'fí'dé'tík) *a.* [Gk. *amphi* both *aster* bound.] Extending behind and in front of umbil *appl* hinge ligaments of some bivalve shells *cf* **epithodetic**.

**amphidiploid** (ám'fí'díp'lóid) *a.* [Gk. *amphi* both *diploos* double.] Double diploid **allotetraploid** *n.* A hybrid having diploid genomes of both parental species.

**amphidisc** (ám'fí'dísk) *n.* [Gk. *amphi* both; *diskos* round plate.] A grape- or disc-shaped spicule of some freshwater sponges.

**amphids** (ám'fí'dis) *n. pl.* [Gk. *amphi* both.] Two anterior lateral sensory organs in nematodes.

**amphigastria** (ám'fígá'stría) *n. pl.* [Gk. *amphi* both *gaster* stomach.] Rudimentary leaves, or scales on under surface of foliose liverworts.

**amphigenesis** (ám'fí'jén'é'sis) *a.* [Gk. *amphi* both *genesis* descent.] Amphigony sexual reproduction

**amphigonic** (ám'fígón'ík) *a.* [Gk. *amphi* both *gonos* seed.] Producing male and female gametes in separate gonads in different individuals **heteral** *par* **amphigony** *cf* **diogonous**, **sygonous**.

**amphigony** (ám'fíg'ón) *n.* [Gk. *amphi* both *gonos* offspring] Reproduction involving two individuals **sporogony** **amphigenesis**.

**amphigynous** (ám'fí'jín'ús) *a.* [Gk. *amphi* both *gyn* female.] *Appl* antheridium surrounding the base of the oogonium, as in some Peronosporales.

**amphikaryon** (ám'fí'ká'r'yón) *n.* [Gk. *amphi* both *karyon* nut.] An amphinucleus or nucleolus with large

karyosome (in reference to supposed encapsuling of kinetic nucleus by trophic nucleus) nucleus with two haploid sets of chromosomes.

**amphimict** (ám'fíníkt) *n.* [Gk. *amphí* both *mixtos* mixed.] A biotype resulting from sexual reproduction an obligate sexual organism.

**amphimixis** (ám'fíníks'is) *n.* [Gk. *amphí* both *mixis* mingling.] The mingling of paternal and maternal characteristics by union of male and female pronuclei in fertilization. *Opp.* pomixis.

**amphinucleolus** (ám'fíníkl's'ól's) *n.* [Gk. *amphí* both *L. nucleolus* small kernel.] A double nucleolus comprising basophil and oxyphil components.

**amphinucleus**,—**amphikaryon**, *g.v.*

**amphiodont** (ám'fíódónt) *a.* [Gk. *amphí* both *odont* tooth.] *Appl.* an intermediate state of mandible development in stag-beetles.

**amphiont** (ám'fíónt) *n.* [Gk. *amphí* both *on* being.] Zygote or sporont formed by coming together of two individuals.

**amphiphilic**,—**periphilic** *g.v.*

**amphiplatyan** (ám'fíp'lát'ian) *a.* [Gk. *amphí* both *platys* flat.] Flat on both ends *appl.* vertebral centra.

**amphipneustic** (ám'fíní'stík'pn-) *a.* [Gk. *amphí* both *pnais* to breathe.] Having both gills and lungs throughout life-history with only anterior and posterior pairs of spiracles functioning as most dipterous larvae **amphipneustous**.

**amphipodo** (ám'fíp'ód'ós) *a.* [Gk. *amphí* both *podus* foot.] Having feet for walking and feet for swimming.

**amphipyrenin** (ám'fíp'ir'én'í) *n.* [Gk. *amphí* both *pyren* fruit-stone.] Substance of which nuclear membrane is composed.

**amphibinal** (ám'fír'nál) *a.* [Gk. *amphí* both *his* nose.] Having or *perí.* two nostrils.

**amphisarca** (ám'fíár's'ká) *n.* [Gk. *amphí* both *sarx* flesh.] A

superior indehiscent many-seeded fruit with pulpy interior and woody exterior.

**amphispermous** (ám'fisp'ér'mís) *a.* [Gk. *amphí* both *sperma* seed.] Having seed closely surrounded by pericarp.

**amphisporangiate** (ám'fisp'ór'án'jít) *a.* [Gk. *amphí* both *spora* seed *angetion* vessel.] Having sporophylls bearing both megasporangia and microsporangia hermaphrodite *appl.* flowers.

**amphispore** (ám'fisp'ór) *n.* [Gk. *amphí* both *spores* seed.] A reproductive spore which functions as a resting spore in certain algae mesospore a uredospore modified to withstand dry environment.

**amphisternous** (ám'físt'ér'ús) *a.* [Gk. *amphí* both *sternon*, breast bone] *Appl.* type of sternum structure in Ateleostomata.

**amphistomic** (ám'físt'óm'ík) *a.* [Gk. *amphí*, both *stoma* mouth.] Having stomata on both surfaces, *appl.* certain types of leaves.

**amphistomous** (ám'físt'óm'ús) *a.* [Gk. *amphí* both *stoma*, mouth.] Having a sucker at each end of body as certain worms.

**amphistyllic** (ám'físt'íl'ík) *a.* [Gk. *amphí* both *stylis* pillar.] Having jaw arch connected with skull by both hyoid and quadrate, or by both hyoid and palato-quadrate exhibiting condition of amphistylis.

**amphitene** (ám'fít'én) *a.* [Gk. *amphí* both *tenia* band.] Stage of meiosis in which spireme threads are uniting in pairs *zygotene*.

**amphitheclm** (ám'fíth'e'kl'm) *n.* [Gk. *amphí* both *thekion* box.] Peripheral layer of cells in sporangia of liverworts and mosses.

**amphitoky** (ám'fít'ók'í) *n.* [Gk. *amphí* both *tokos* birth.] Parthenogenetic reproduction of both males and females.

**amphitridens** (ám'fít'ríd'én) *n.* [Gk. *amphí* both *tridens* trident.] A double trident-shaped spicule.

- amphitrichous** (ámfitríkhs) *a.* [Gk. *amphi* both *trichis* hair] With flagellum at each pole *amphi* bacteria amphitrichate, amphitrichic.
- amphitrocha** (ámfitrókhs) *a.* [Gk. *amphi* both *trochos* wheel.] A free-swimming annelid larva with two rings of illa.
- amphitropous** (ámfitrópús) *a.* [Gk. *amphi* both *trope* turning] Having the ovule inverted, with hilum in middle of one side.
- amphixylic,—perixylic** *g.s.*
- amphocyte** (ámfoýt) [Gk. *amphi* both (two) *kytos* hollow] An amphophil cell.
- amphogonic** (ámfojéník) *a.* [Gk. *amphi* both of two *gonos* producing] Producing offspring consisting of both males and females.
- amphophil** (ámfofí) *a.* [Gk. *amphi* both of two *philos* to love.] *Amphi* cells staining with basic and acid dyes amphochromatophil neutrophil *n.* Amphocyte.
- amphoteric** (ámfoitérik) *a.* [Gk. *amphoteris* in both ways.] With opposite characters acidic and also basic.
- amplectant** (ámpléktánt) *a.* [L. *amplecti* to embrace.] Claspng or winding tightly round some support, as tendrils.
- amplectical** (ámpléktíká) *a.* [L. *amplecti* to embrace *caulis* stem.] Claspng or surrounding the stem, as base of leaf.
- plexus** (ámpléksús) *a.* [L. *amplexus* embrace.] Sexual embrace, in batrachians.
- ampliat** (ámplíát) *a.* [L. *amplatus* made wider] II wing outer edge of wing prominent as in certain insects.
- amplificati** (ámplífíkáshún) *a.* [L. *amplificatio* enlargement.] Changes towards increased structural or functional complexity in ontogeny or phylogeny *Opp* reduction.
- ampulla** (ámpool'á, pól) *a.* [L. *ampulla*, flask.] A membranous vesicle dilatation of lactiferous

- tubul beneath areola dilated portion at one end of each semi-circular canal of ear dilatation of united common bile-duct and pancreatic duct part of oviduct between infundibulum and isthmus dilated portion of vas deferens at fundus of urinary bladder terminal dilatation of rectum internal reservoir on ring canal of water vascular system in echinoderms terminal vesicle of sensory canals of chasmobranchs submerged bladder of Utricularia.
- ampullaceous** (ámpulléshál) *a.* [L. *ampulla* flask.] Flask-shaped, *amphi* arachnid spinning glands which furnish silk f foundations, lines and radii *amphi* sensillae
- ampullaceous** (ámpulléshús) *a.* [L. *ampulla*, flask.] Flask-shaped *amphi* sensillae.
- ampullary** (ámpool'ári pól') *a.* [L. *ampulla* flask.] Part or resembling an ampulla.
- ampullula** (ámpool'úla -pól-) *a.* [Dim of L. *ampulla*, flask.] A small ampulla, as of some lymphatic vessels.
- ampyx** (ámplíks) *a.* [Gk. *ampyx* fillet.] A transverse bar connecting the rostralia of Palaeospondylians.
- myelitic** (ámíéíntík) *a.* [Gk. *a*, without *myelos* marrow] With out myelin *amphi* non-medullated or grey nerve-fibres amyelinate.
- amygdala** (ámig'dálá) *a.* [L. from Gk. *amygdal* almond.] Almond one of palatal tonsils rounded lobe t side f vallecula of cerebellum.
- amygdalin** (ámig'dálin) *a.* [Gk. *amygdale* almond.] A compound occurring in fruit kernels of bitter almonds and other Rosaceae, and producing hydrocyanic acid, glucose and benzaldehyde po hydrolysis  $C_{20}H_{27}O_5$  N
- amylase** (ám'íás) *a.* [L. *amylon* starch.] An enzyme which converts (a) starch into dextrin, or (β) dextrin into maltose amylolytic enzyme.
- amylolytic,—amylolytic**, *g.s.*



myloid (ám'íold) *a.* [Gk. *amyl* *n* starch *eidos* form.] Starch-like *n* Starch-like substance

amyloid bodies—concretions found in alveoli of adult prostate gland.

amylolytic (ám'íólít'ík) *a.* [Gk. *amylon* starch *lysis* loosing] Starch-digesting *appl* enzymes.

amylome (ám'íóm) *n.* [Gk. *mylon* starch.] Starch-containing wood-parenchyma layer of starch-containing cells between central cylinder and leptoids of certain moss rhizomes.

myloplast (ám'íóplást') *n.* [Gk. *amylon* starch *plastar* formed.] A leucoplast colorless starch-forming granule in plants amyloplastid

amylipain (ám'íóp'sín) *n.* [Gk. *amylon* starch *opon* seasoning] Pancreatic amylase.

amylose (ám'íóse) *n.* [L. *amylum*, starch.] The substance forming starch.

amylostolith (ám'íóstólít'h) *n.* [Gk. *amylon* starch *stator* stationary *lithos* stone.] A starch grain which moves under the influence of gravity in a statocyte of statolith.

amylum (ám'íúm) *n.* [L. *amylum* starch.] Vegetable starch ( $C_6H_{12}O_6$ )

nablosis (án'ábłó'sis) [Gk. *ana*, *n* *his* life.] Resuscitation after apparent death power of revivification, as seen in certain Tardigrada.

anabolism (ánáb'ólím) *n.* [Gk. *ana* up *bale* throw] The constructive chemical processes in living organisms, *opp* katabolism.

anabolite (ánáb'ólít') *n.* [Gk. *ana* up *bale* throw] A substance participating in anabolism.

anacrogynous (ánák'rój'ínús) *a.* [Gk. *an* not *akros* apex *gyn* female.] *Appl* certain liverworts in which female reproductive bodies do not arise at or near apex of shoot. *Opp* acrogynous.

anacromyoidian (ánák'rómíóid'íán) *a.* [Gk. *ana* up *akros* apex *mys* muscle *eidos* form.] With

syringeal muscles attached at dorsal ends of bronchial semi-rings.

anadromous (ánád'rómús) *a.* [Gk. *ana*, up *drumein* to run.] *Appl* fishes which migrate from salt to fresh water annually *Opp* catadromous.

anaerobe (áná'érób) *n.* [Gk. *an*, without *aer* *ai* *bios* life.] An anaerobic organism capable of living in absence of free oxygen. *Opp* erobe. *a* Anaerobic.

anaerobiosis (áná'érób'íós'is) *n.* [Gk. *an* without *aer* *ai*; *biosis* manner of life.] Existence in absence of free oxygen.

anaesthesia (ánést'hé'siá) *n.* [Gk. *ana* without *aisthesis* feeling] Local or general insensibility

anagenesis (án'ájén'é'sis) *n.* [Gk. *ana*, again *genesis* descent.] Regeneration of tissues progressive evolution.

anakinetic (án'ákinét'ík) *a.* [Gk. *ana*, up *kinein*, to move.] *Appl* process which restores energy of katabolism.

anakinetic meres (án'ákinét'ómérz) *n. plu* [Gk. *ana*, up *kinein* to move *meros* part.] Energy-rich reactive atoms or molecules.

anal (ánál) *a.* [L. *anus* anus.] *Part.* or situated at or near the anus *appl* posterior median ventral fin of fishes margin and vel of insect wing posterior ventral scute of reptiles, etc.

analogues (án'álógz) *n. plu.* [Gk. *analogos* proportion.] Organs of different plants or animals with like function but of unlike origin.

analogy (ánál'ój'í) *n.* [G. *analogia*, proportion.] Resemblance in function though not in structure or development.

anam stíl (ánám'stíl) *a.* [Gk. *ana* *n* *mesos* filled] *Appl* small variable bones filling spaces between larger bones of more fixed position as in fish skulls.

anamniote (ánám'níót) *n.* [Gk. *a*, not *amnion* foetal membrane.] An animal which has no amnion in embryonic life.

**anamorpha** (ánámór'fá) *n. pl.* [Gk. *ana* backwards; *morpha* form.] Larvae hatched with incomplete number of segments of epl. morpha.

**anamorphosis** (ánámó'fósis) *n.* [Gk. *ana*, throughout; *morphosis* shaping.] Evolution from one type to another through a series of gradual changes.

**anandrous** (ánán drós) *a.* [Gk. *a* without; *aner* male.] Without stamens.

**anangian** (ánán'ján) *a.* [Gk. *a* without; *angion* vessel.] Appl. worms without vascular system.

**anatherous** (án ánthéros) [Gk. *a*, without; *antheros* flowering.] Without anthers.

**anthon** (ánán thís) *a.* [Gk. without; *anther* flower.] Not flowering without inflorescence.

**anaphase** (án áfiz) *n.* [Gk. *ana*, up; *phasis* appearance.] A stage in mitosis during divergence of daughter chromosomes the stages of mitosis up to division of chromatin into chromosomes of karyphase.

**anaphylaxis** (án áfilák'sis) *n.* [Gk. *ana*, up; *phylax* guard.] Condition of being hypersensitive to serum or foreign protein, caused by first or sensitizing dose.

**anaphyt** (án áfti) *n.* [Gk. *ana*, p; *phyton* plant.] Transverse segment of a shoot an internode.

**anaplasia** (ánáplá'sis) *n.* [Gk. *ana* again; *plasis* to form.] Undifferentiation reversion to less differentiated structure.

**anoplast** (án'áplást) *n.* [Gk. *ana*, up; *plaster* formed.] A leucoplastid anoplastid.

**anapleurite** (án'áplúo'n) *a.* [Gk. *ana*, up; *pleura*, side.] Upper thoracic pleurite as in certain Thysanura.

**anapophysis** (án ápó'fisis) *n.* [Gk. *ana*, up; *epi* from; *physis* origin.] A small dorsal projection rising near transverse process in lumbar vertebrae.

**anapsid** (ánáps'id) *a.* [Gk. *ana*, up

*apsis* arch.] With skull wholly imperforate or completely roofed over; stegocrotaphic.

**anaptychus** (ánáp'tíkus) *n.* [Gk. *ana*, throughout; *ptyche* plate.] Aptychus or operculum consisting of a single plate, as in certain ammonites of synaptychus.

**anarthrous** (ánár'thrós) *a.* [Gk. *a*, without; *arthron* joint.] Having no distinct joints.

**anasthistic** (án'asthétik) *a.* [Gk. *ana*, up to; *schistein* to split.] Appl. type of tetrads which divide twice longitudinally in meiosis of diasthistic.

**anastates** (án ástís) *n. pl.* [Gk. *ana*, p to; *stasis* standing.] Various materials that arise owing to rosette bolism in cell in formation of complex from simple substances. Opp. katastates.

**anastomosis** (ánástómó'sis) *n.* [Gk. *ana*, up to; *stoma*, mouth.] Union of ramifications of leaf-veins union of blood-vessels arising from common trunk; union of nerves fine threads joining chromonemata in resting nucleus formation of network or anastomotic meshwork.

**anastral** (ánás'tráil) *a.* [Gk. *an* not; *aster* star.] Appl. type of mitosis without aster formation.

**anatomy** (ánát'ómí) *n.* [Gk. *ana*, up; *temnein* cutting.] The science which treats of the structure of plants and of animals, as determined by dissection usually human anatomy.

**anatoxin**,—toxinoid, *q.v.*

**anatrepsis** (ánátrep'sis) *n.* [Gk. *anatrepein* to turn over.] Stage of increasing movement in blastokinesis.

**anatriasene** (án'átrí'én) *n.* [Gk. *ana* p; *triasis*, trident.] Triasene with backwardly directed branches.

**anatropous** (ánát rópos) *a.* [Gk. *anatrepein* overturning.] Inverted, appl. ovules with hilum and micropyle close together and chalazae at other end anatropal.

**anaxial** (ánák'síál) *a.* [Gk. *a*, without; *axis* axis.] Having no distinct axis asymmetrical.

ancestrula (än'stə'trōolä) *n* [L. *anteceder* : go before] First zoecium of polyzoon colony

anchor (äng'kōr) *n*. [L. *ancora* anchor] Anchor-shaped spicule found in skin of Holothuria.

anchylosis (äng'klō'sis) *n*. [Gk. *angchēn*, to press tight.] Union of two or more bones or hard parts to form one part, *e.g.* 1 bone to bone or tooth to bone ankylosis.

anconeal (ängkō'neäl) *a* [Gk. *angkon* elbow] *Peri* the elbow

anconeus (äng'kōnē'ūs) *n* [Gk. *angkon* elbow] Small extensor muscle situated over elbow anconeus.

andrase (änd'räs) *n* [Gk. *aner* male.] A male-determining factor in form of an enzyme or hormone.

andria (änd'rin) *n* [Gk. *aner* male] The testicular androgens.

androecia (än'drōkē'siä) *n. Plu.* [Gk. *aner* male *heleis* dust.] Modified wing-scales producing sexually attractive scent in certain male butterflies.

androcyte (ä'drōsh) *n*. [Gk. *aner* mal *kytos* hollow] A cell arising by growth from an androgonium and giving rise to antherozoid.

androdioecy (änd'rōdiō'siōs) *a*. [Gk. *aner* male *diō* two *oikos* house] Having mal and hermaphrodit flowers on different plants.

androeci (änd'rō'siūm) *n*. [Gk. *aner* male *oikos* house.] Male reproductive organs of plant stamens taken collectively

androgametangium (änd'rōgām'ētän'jiūm) *n*. [Gk. *aner* male *gēnesis* power *aggeleion* vessel.] A structure producing male sexual cells antheridium.

androgen (änd'rōjēn) *n* [Gk. *aner* male *gēnes* descent] A mal hormone masculinizing substance.

androgen (änd'rōjēn'ētis) *n*. [Gk. *aner* male *gēnesis* descent] Development of egg furnished with paternal chromosomes only male parthenogenesis.

andrognetic (änd'rōjēn'ēt'ik)

[Gk. *a* or *mal* *gēnesis* descent] Having paternal chromosomes only

androgenic (änd'rōjēn'ik) *a*. [Gk. *aner* male *gēnesis* to produce]

Stimulating male characters masculinizing *appt* hormones *appt*

tissue capable of elaborating an androgenic hormone androgenous *g*

androgenous (änd'rōj'ēnūs) *a* [Gk. *aner* male *gēnes* descent.] Pro-

ducing only male offspring

androgonidia (änd'rōgōnid'ia) *n. plu.* [Gk. *aner* male *gēnes* offspring

*adion* dim.] Male sexual elements formed after repeated divisions of

parthenogonidia f Volvox.

androgonium (änd'rōgō'siūm) *n*. [Gk. *aner* male *gēnes* offspring]

An early stage in formation of sperm-cells of plants.

androgynal (änd'rōj'inäl) *a* [Gk. *aner* male *gyn* female.] Her-

maphrodit bearing both staminate and pistillate flowers in the

same inflorescence with antheridium and oogonium on the same

hypha androgynous.

androgynary (änd'rōj'inärī) *a*. [Gk. *aner* male *gyn* female.] Having

flowers with stamens and pistils developed into petals.

androgyn (ä'drōjīn änd'rōjīn) *a*.

*n* Hermaphrodite.

androgynism (änd'rōj'inizm) *n*. [Gk. *aner* male *gyn* female.] The

condition of bearing both stamens and pistils hermaphroditism.

andromerogony (änd'rōmērōg'ōni)

*n*. [Gk. *aner* mal *meros* part *gēnes* generation.] The develop-

ment of an egg fragment with only paternal chromosomes.

andromonoecious (änd'rōmōnē'siōs)

*a*. [Gk. *aner* male *monos* alone *oikos* house.] Having mal and hermaphrodit flowers on the same plant.

andropetal (änd'rōpēt'äl) *a*. [Gk. *aner* male *petalon* leaf]

Having petaloid stamens.

androphore (änd'rōfō) *n* [Gk. *aner* male *phoros* carrying] Stalk sup-

porting androeci on stamens

stalk carrying mal gonophores in

S gonophora.

and phyll (än dröf'f) *n* [Gk. *aner* male *phyllon* leaf] The leaf bearing microspores the microsporophyll.

androsome (än drösöm) *n* [Gk. *aner* mal *soma* body] A male-limited chromosome.

androsporangium (än dröspörän jüm) *n*. [Gk. *aner* male *spora* seed *anggeion* vessel.] A sporangium containing androspores.

androspore (än'dröspör) *n*. [Gk. *aner* male *spora* seed.] An asexual zoospore which gives rise to male dwarf plant male spore microspore pollen grain.

androsteron (än dröstörön) *n*. [Gk. *aner* male *ster* vet.] Male hormone present in adrenal cortex, obtained from urine  $C_{15}H_{26}O_2$ .

androtyp (än dröt'p) *n*. [Gk. *aner* male *typos* pattern.] Type specimen of the male of species.

analektroto us (än äl'ektrotös nüs, än äl'ektrotös'nüs) *n*. [Gk. *ana* up *elektros*, amber *tonos* tension.] Decrease in irritability of a nerve under influence of non-polarizing electric current.

anellus (än'el'üs) *n*. [L. *anellus* little ring] A small ring-shaped or triangular plate supported by valves and vinculum in Lepidoptera.

anemochorous (änemokör'üs) *a*. [Gk. *anemos* wind *chore* place.] Dispersed by wind with seeds so dispersed.

an euphious (änemöf'füs) *a*. [Gk. *anemos* wind *philein*, to love.] Wind-pollinated.

an m phily (änemöf'fili) *n*. [Gk. *anemos* wind *philein*, to love.] Plant fertilization by agency of wind.

an m plankton (änem'öplängk tön) *n*. [Gk. *anemos* wind *planktos* wandering.] Wind-born organisms and living particles aeroplankton, *f*.

an mospori (änem öspör'ik) *a*. [Gk. *anemos* wind *spora* seed.] Having spores or seeds disseminated by air currents.

anemotaxis (änem'ötäk sh) *n*. [Gk. *anemos* wind *taxis* arrange-

ment.] Directed movement in response to air currents.

an motropism (änemöt röptüm) *n*. [Gk. *anemos* wind *trope* turn.] Orientation of body or plant curvature, in response to air currents.

anencephaly (änenk'ef'äli -sēf') *n* [Gk. *an* not *encephalon* brain.] Condition of having no brain.

an terous (än'en'terös) *a*. [Gk. *an* without *enteron* gut.] Having no alimentary tract acenteric.

aner (än är änär) *n*. [Gk. *aner* male.] The male of insects, especially of ants.

anestrum,—anecstrus, *g.s*

aneu te tric (än'eu ten trik) *a*. [Gk. *a* without *eu* well *kentron* centre.] Acentric and dicentric, resulting from translocation involving centromere of a chromosome.

an uploid (än öploid) *a*. [Gk. *a*, without *eu* well *ephes* onefold.] Having fewer or more chromosomes than an exact multiple of the haploid number *öpp* euploid.

aneurine (än'ür'in) *n*. [Gk. *a*, without *neuron* nerve.] Vitamin B<sub>1</sub>, the anti-beri-beri factor in yeast, legumes, cereals, and other foods *aneurin* thiamine (U.S.A.)  $C_{12}H_{18}ON_4SCl_2$ .

aneuronic (än'ürön'ik) *a*. [Gk. *a*, without *neuron* nerve.] Without innervation *öpp* chromatophores controlled by hormones.

anfractuose (änfräk'tüs) *a*. [L. *anfractus* bending.] Wavy sinuous.

angleuchyma (än jäng'äimä) *n* [Gk. *anggeion* vessel *exchaia* to pour] Vascular tissue.

angi blast (än jöbläst) *n*. [Gk. *anggeion*, vessel *blastos* bud.] One of cells from which lining of blood-vessels is derived vasoformative cell.

angiocarpi (än jökar p'ik) *a*. [Gk. *anggeion* vessel *karpis* fruit.] Having fruit enclosed angiocarpous *öpp* fungi. *Öpp* gymnocarpic.

**angiology** (án'jól'ójn) *n* [Gk. *anggeion* vessel *logos* discourse] Anatomy of blood and lymph vascular systems.

**angiospermous** (ánjiospér'mós) *a* [Gk. *anggeion* vessel *sperma*, seed.] Having seeds in closed case, the ovary

**angiosporous** (ánjios pórs) *a*. [Gk. *anggeion* vessel *sperma* seed.] Having spores contained in a theca or spore capsule.

**angiotomatus** (án'jiosóm'átós) *a*. [Gk. *anggeion* vessel *stoma* mouth.] Narrow-mouthed *appl* an order of molluscs, and to a sub-order of snakes, with non distensible mouth.

**angiotonin** (án'jios ónin) *n*. [Gk. *anggeion* vessel *tonos* tension.] Substance in circulating blood formed by reaction between hypertensinogen elaborated in the liver and renin, causing constriction of arterioles hypertensin.

**ångström** (óg'strém) *n* [*A* / *Ångström* Swedish physicist] One ten millionth part of millimetre symbol Å.

**angular** (áng'gúlar) *n* [*L. angulus* corner] A membrane bone of lower jaw in most vertebrates. *a* Having or *port* an angle *appl* leaf originating at forking of stem, as in many ferns *appl* collenchyma with cell-walls thickened in the angles of the cells.

**angulosplénial** (áng'gúlosplic'nis) *n* [*L. angulus* corner *splenum* patch.] Bone forming most of lower and inner part of mandible in Amphibia.

**angulus** (áng'gúlos) *n* [*L. angulus* angle] An angle as that formed by junction of manubrium and body of sternum (angle of Louis).

**angustifoliate** (ánggús'tifó'tilis) *a*. [*L. angustus* narrow *folium* leaf] With narrow leaves.

**angustirostrat** (ánggús'tirós'trís) *a*. [*L. angustus* narrow *rostrum* beak.] With narrow beak or snout.

**anholocyclic** (án'hólok'ik) *a*. [Gk.

*an* not *holos* whole *tyklos* circle.] *Port* alternation of generations with suppression of sexual part of cycle permanently parthenogenetic.

**anidian** (ánd'idán) *a*. [Gk. *an* not *eidos* form.] Formless *appl* blastoderm without apparent embryonic axis.

**animal pole**,—the upper more rapidly segmenting portion of telolecithal egg *Opp* vegetal pole.

**anion** (án'íon, án'íon) *n*. [Gk. *ana*, up *ionai* to go.] A negatively-charged particle or ion which moves up towards the anode or positive pole.

**anisocarpous** (ánisókar'pós) *a*. [Gk. *anisos* unequal *karpos* fruit.] Having number of carpels less than that of other floral whorls.

**anisocercal** (ánisóér'kál) *a*. [Gk. *anisos* unequal *heros* tail.] With lobes of tail—in unequal.

**anisocheila** (ánisóké'íla) *n* [Gk. *anisos* unequal *cheile* claw] A chela with the two parts unequally developed.

**anisodactylous** (ánisódik'tílos) *a*. [Gk. *anisos* unequal *daktylos* finger] Having unequal toes, three toes forward one backward.

**anisogamete** (án'isógámét) *n*. [Gk. *anisos* unequal *gametes* spouse.] One of two conjugating gametes differing in form or size.

**anisogamous** (ánisóg'amós) *a*. [Gk. *anisos*, unequal *gamos* marriage.] *Appl* differentiated gametes or conjugating bodies.

**anisogamy** (ánisóg'amí) *n* [Gk. *anisos* unequal *gametes* spouse.] Configuration between sharply differentiated gametes heterogamy

**anisognathous** (án'isóg'náthós) *a*. [Gk. *anisos* unequal *gnathos* jaw] With jaws of unequal width having teeth in upper and lower jaws like

**anisomorphous** (ánisóm'étrós) *a*. [Gk. *anisos* unequal *morphos* part.] Having unequal numbers of parts in floral whorls.

**anisophyll** (án'isófil) *n* [Gk. *anisos* unequal *phyllon* leaf] Condition of having leaves of two or more sizes or shapes, as in some conifers and aquatic plants.

**anis pleural** (án'isplóorál) *a*. [Gk. *anisos* unequal *pleura* side.] Asymmetrical bilaterally

**anisoploid** (án'isóplóid) *a*. [Gk. *anisos* unequal; *aploos* unfold *eidos* form.] With an odd number of chromosome sets in somatic cells. *n*. An anisoploid individual.

**anisopogonous** (án'isópóg'ónis) *a*. [Gk. *anisos* unequal *pogon* beard.] Unequally webbed, with reference to feathers.

**anisopterus** (án'isóptérus) *a*. [Gk. *anisos* unequal *pteron* wing] Unequally winged *appt* seeds.

**anisospore** (án'isóspór) *n* [Gk. *anisos* unequal *spore* seed.] A dimorphic spore, the sexes differing in size.

**anisostemonous** (án'isóstém ónís) *a*. [Gk. *anisos* unequal; *stemon* spun thread.] Having the number of stamens unequal to the number of parts in other floral whorls having stamens of unequal size.

**anisotropi** (án'isótróp'ik) *a*. [Gk. *anisos* unequal *trope* turn.] *Appt* eggs with predetermined axis or axes exhibiting anisotropy doubly refracting *appt* dark bands of voluntary muscle fibre. *Opp* isotropic.

**ankylosis, — ankylosis, *q &***

**ankyroid** (áng'kíroid) *a*. [Gk. *ankura*, hook *eidos* form.] Hook-shaped.

**anlag** (án'lág) *n*. [Ger *Anlage* predisposition] The first structure or cell group indicating development of part or organ inception primordium *chauche*.

**annectant** (án'ek'tánt) *a*. [L. *annecto* to bind together] Linking *appt* intermediate species or genera.

**annelid** (án'élid) *a*. [L. *annulus* ring Gk. *eidos* form.] Constructed of ring-like segments, as ringed worms *part* Annelida.

**annotinous** (án'ótínús) *a* [L. *annus*

year] A year old *appt* growth during the previous year

**annual** (án'úál) *a* [L. *annus* year] *Appt* structures & features that are marked off or completed yearly living for a year only

**an ual ring** — one of the rings, seen in transverse sections of dicotyledons, indicating the secondary growth during year growth ring of bivalve shells.

**annular** (án'úlar) *a*. [L. *annulus* ring] Ring-like *appt* certain ligaments of wrist and ankle *appt* (orbicular) ligament encircling head of radius and attached to radial notch of ulna *appt* certain lamina or sternal plates in ants *appt* certain vessels in xylem, owing to ring-like thickenings in their interior *appt* bands formed on inner surface of cell wall.

**annulate** (án'úlát) *a*. [L. *annulus* ring] Ring shaped composed of ring-like segments having colour arranged in ring-like bands or annuli.

**annul s** (án'úús) *n*. [L. *annulus* ring] Any ring-like structure special ring in fern sporangium by action of which sporangium bursts remains of veil in mushroom ring of cells in moss capsule whose rupture causes opening circular groove for transverse flagellum i Dinoflagellata ring of annelid fourth digit of hand.

**anococcygeal** (án'ókókal) (ál) *a*. [L. *an* anus *coccyx* Gk. *kukkyx* cuckoo.] *Part* region between coccyx and anus, *appt* body of fibrous and muscular tissue, nerves etc.

**anoestrus** (án'óstrús) *n*. [Gk. *an* not *oistros* gad fly] The non-breeding period period of absence of sexual urge anoestrus of dioestrus.

**anomaly** (án'óm'ál) *n*. [Gk. *anomalos* uneven.] Any departure from type characteristics.

**anomophyll us** (án'óm'ófil'ús) *a*. [Gk. *anomalos* lawless *phyllon* leaf.] With irregularly placed leaves.

**anorganology** (än'örgänöl'öj) *n.* [Gk. *a* not *organon* instrument / *logos* discourse.] Study of non-living things *abiology*.

**anorthogenesis** (än'örthöjén'ésis) *n.* [Gk. *an* not *orthos* straight / *genesis* descent.] Evolution manifesting changes in direction of adaptations owing to preadaptation *zigzag evolution*.

**anorthospiral** (än'örthöspí'räl) *a.* [Gk. *an* not *orthos* straight / *spira*, coil.] Relationally coiled, spirals not interlocking *paranemic*. *Opp* orthospiral *plectonemic*.

**anosmatic** (ändemät'ík) *a.* [Gk. *a*, without *osme* smell.] Having no sense of smell *anosmic*.

**anosmia** (ändé mlä) *n.* [Gk. *a*, without *osme* smell.] Absence or loss of sense of smell.

**anoxymbiotic** (ändök sīböt'ík) *a.* [Gk. *a*, not *oxys* sharp / *bios* means of life.] Capable of living in absence of oxygen *anaerobic*.

**ansa** (ändä) *n.* [L. *ansa* handle.] Loop as of certain nerves.

**anseris** (än'sérin) *n.* [L. *anser* goose.] A constituent of bird's muscle  $C_{22}H_{41}ON$ .

**analiform** (än'äl'förm) *a.* [L. *ansa*, handle / *forma* shape.] Loop-shaped looped *appl.* outer cytoplasm in cerebro-spinal ganglia.

**antagonist** (ántäg'ónist) *n.* [Gk. *antagonistes* adversary.] A muscle acting in opposition to the action produced by prime mover or *gonist* an *antihormone*, *q.v.*

**antambulacral** (ánt'ämbülä'kräl) *a.* [Gk. *anti* against L. *ambulare* to walk.] Not situated on the ambulacral area *abactinal q.v.*

**antapex** (ántäp'eks) *n.* [Gk. *anti* opposite L. *apex* tip.] Tip of hypocoel in *Dinoflagellata*.

**antapical** (ántäp'ikäl) [Gk. *anti* opposite L. *apex* tip.] At or *post.* antapex *post.* region opposite *per.*

**antebrachial** (än'tébrä'kiüm) *n.* [L. *ante* before / *brachium* arm.] The fore-arm or corresponding portion of a fore-limb.

**anteclypeus** (än'téklip'éüs) *n.* [L. *ante* before / *clypeus* shield.] Anterior portion of clypeus when differentiated by suture of post clypeus.

**antecosta** (ántékö'stä) *n.* [L. *ante* before / *costa* rib.] Internal ridge of tergum for attachment of intersegmental muscles in insects, extended to phragma in larva segments.

**antecubital** (än'tékü'bítäl) *a.* [L. *ante* before / *cubitus* elbow.] Anterior to the elbow.

**antedorsal** (än'tédör'äl) *a.* [L. *ante* before / *dorsum* back.] Situated in front of dorsal fin in fishes.

**antefrons** (än'téfröns) *n.* [L. *ante* before / *frons* forehead.] The portion of frons anterior to antennary base line in certain insects.

**antelabrum** (ántelä'brüm) *n.* [L. *ante* before / *labrum* lip.] The anterior portion of insect labrum when differentiated.

**antemarginal** (ántémär'jinäl) *a.* [L. *ante* before / *margo* edge.] *Appl.* *sori* of ferns when they lie within margin of frond.

**antenna** (ántén'ä) *n.* [L. *extrema*, sail yard.] A jointed feeler on head of various Arthropoda.

**antennary** (ántén'ärí) *a.* [L. *extrema*, sail-yard.] Like a *post.* or situated near an antenna *antennal*.

**ant sulfer** (ántén'lífer) *n.* [L. *extrema* sail yard / *ferre* to carry.] Socket of antenna in arthropods projection on rim of antennal socket acting as pivot in myriopods.

**antennule** (ántén'ül) *n.* [L. *dimin.* from *antenna*.] A small antenna or feeler specifically the first pair of antennae in Crustacea.

**anteposition** (än'tépö'zish ün) *n.* [L. *ante* before / *ponere* to place.] Superposition of whorls in flower typically alternating.

**anterior** (ánté'riör) *a.* [L. *exterior* / *inner*.] Nearer head end ventral in human anatomy / facing outwards from axis previous.

**anterolateral** —ventrolateral.

antesternalite (ân tĕstĕr nĭt) *n.* [L. *ante* before *sternum* breast bone] Anterior sternal sclerite of insects between mesosternum and metasternum.

anthela (ânthĕl'ă) *n.* [Gk. *anthelais*, to bloom.] The cymose inflorescence of the rush family.

anthelix,—anthelix *q.v.*  
anther (ânthĕr) *n.* [Gk. *antheros* flowering] The part of stamen which produces pollen.

antherid,—antheridium.

antheridia—*pl.* of antheridium.

antheridial cell—the larger of two cells derived from a microspore and giving rise to an antheridium or to cell representing an antheridium.

antheridiophore (ânthĕrĭd'ĭōf'ōr) *n.* [Gk. *anthes* flower *idion* dim. *phorion*, to bear] A gametophore bearing antheridia.

antheridium (ânthĕrĭd'ĭŭm) *n.* [Gk. *anthes* flower *idion* dim.] An organ or receptacle in which male sexual cells are produced in many cryptogams male gametangium cluster of microgametes, as in certain Flagellata.

antherozoids (ânthĕrōz'ōĭds) antherozooids (ânthĕrōz'ōĭds) *n.* *pl.* [Gk. *anthes* flower *zōon*, animal *eidos* form.] Male sexual cells in antheridia.

anthesis (ânthĕ'sĭs) *n.* [Gk. *anthes* flower] Stage or period at which flower bud opens flowering period of flowering.

anth blast (ânthōblăst) *n.* [Gk. *anthes* flower *blastos* bud.] In Madreporaria, young sessile polyp producing anthocyathus.

anthocarpous (ânthōkăr'pŭs) *n.* [Gk. *anthes* flower *karpos* fruit.] *Appl.* aggregated fruits, products of fusion of several flowers, as sorosis and syconus.

anthocaulis (ânthōkăŭl'is) *n.* [Gk. *anthes* flower L. *caulis* stem.] The pedicel of a late trophozooid stage of madrepora development.

anthocodia (ânthōkōd'ĭă) *n.* [Gk. *anthes* flower *codon*, band.] The distal portion of zooid bearing mouth and tentacles in Alcyonaria.

anthocyanin (ânthōs'ăn'ĭn) *n.* [Gk. *anthes* flower *kyanos* dark blue] One of the blue or violet pigments of flowers, leaves, and stems.

anthocyathus (ânthōs'ăth'ŭs) *n.* [Gk. *anthes* flower *kyathos* cup.] The discoid crown of trophozooid stage in madrepora development.

anthodium (ânthōd'ĭŭm) *n.* [Gk. *anthes* flower *eidos* form.] Capitulum or head of Compositae.

anthogenesis (ânthōjĕn'ĕsĭs) *n.* [Gk. *anthes* flower *genesis* descent.] In certain aphids, production of both males and females by asexual forms.

anthophilous (ânthōf'ĭl'ŭs) *a.* [Gk. *anthes* flower *philein* to love.] Attracted by flowers feeding on flowers.

anthophore (ânthōf'ōr) *n.* [Gk. *anthes* flower *phorion* to bear] Elongation of thalamus between calyx and corolla.

anthophyte (ânthōf'ĭt) *n.* [Gk. *anthes* flower *phyton*, plant.] A flowering plant phanerogam phanerogam, spermatophyte.

anthostrobus (ânthōstrōb'ŭs) *n.* [Gk. *anthes* flower *strablos* fir cone.] Fructification or flower of certain cycads.

anthotaxis (ânthōtăk'sĭs) *n.* [Gk. *anthes* flower *taxis* arrangement.] Arrangement of flowers on an axis.

anthoxanthin (ânthōzăn'thĭn) *n.* [Gk. *anthes* flower *xanthos* yellow] A yellow pigment of flowers.

anthropel (ânthrōpĕl'ĭk) *n.* [Gk. *anthropos* by human means.] Due to influence of man.

anthropogenesis (ânthrōpōjĕn'ĕsĭs) *n.* [Gk. *anthropos* man *genesis* descent.] The ontogenesis and phylogenesis of man descent of man.

anthropogenetic (ânthrōpōjĕnĕt'ĭk) *a.* [Gk. *anthropos* man *genesis* descent.] *Part.* anthropogenesis.

anthropogenic (ânthrōpōjĕn'ĭk) *a.* [Gk. *anthropos* man *genos* descent.] Produced or caused by man.



**anthropoid** (án'thrōpoid) *a.* [Gk. *anthropos* man *eidos* form.] Resembling man *appl* tailless apes.

**anthropology** (án'thrōpōl'ōjī) *n.* [Gk. *anthropos* man *logos* discourse.] The natural history of man.

**anthropometry** (án'thrōpōm ētrī) *n.* [Gk. *anthropos* man *metron* measure.] That part of biology dealing with proportional measurements of parts of the human body.

**anthropomorph** us (án'thrōpōmōfəs) *a.* [Gk. *anthropos* man *morphe* shape.] Resembling man.

**anthropotomy** (án'thrōpōtōmī) *n.* [Gk. *anthropos* man *tomos* to cut.] Human anatomy.

**antia** (án'tī) *n. pl.* [L. *antibus* forelock.] Feathers at base of bill-ridge of some birds.

**anti-apex**,—lower end of axis as in rootless plants.

**antiauxin** (án'tīōks'in) *n.* [Gk. *anti* against *auxin*, to grow.] An organic compound which regulates or inhibits growth stimulation by auxins.

**antibiosis** (án'tībīō'sis) *n.* [Gk. *anti* against *bios* life.] Antagonistic association of organisms as by production of harmful compounds.

**antiblastic** (ántībīlās'tik) *a.* [Gk. *anti* against *blastos* bud.] *Appl.* immunity due to forces which inhibit growth of invading organism.

**antibody** (án'tībōd'ī) *n.* [Gk. *anti* against A.S. *bodig* body.] Any substance formed in blood which reacts with a specific antigen or antagonizes toxins.

**antibrachial** (án'tībrāk'khal) *a.* [Gk. *anti* against L. *brachium* arm.] *Part* forearm *appl* fascia muscles, vein, nerves also antibrachial.

**antibrachium**,—antebrachium *q.v.*

**anticipation** (án'tīspā'shūn) *n.* [L. *anti* before *capere* to take.] The manifestation of a condition or disease at progressively earlier age in successive generations.

**anticlinal** (án'tīklī'nāl) *a.* [Gk. *anti* against *klinos* to slope.] *Appl.* line of division of cells at right angles to surface of apex of growing point; in quadrupeds, *appl.* one of lower thoracic vertebrae with upright spine towards which those on either side incline.

**anticoagulin** (án'tīkōāg'ūlīn) *n.* [Gk. *anti* against L. *coagulum* rennet.] A substance which prevents coagulation of drawn blood as hirudin.

**anticryptic** (án'tīkrīpt'ik) *a.* [Gk. *anti* against; *byptos* hidden.] *Appl.* protective coloration facilitating attack.

**anticubital**,—antebrachial *q.v.*

**antidiuretic** (án'tīdīrēt'ik) *a.* [Gk. *anti* against *diu*, through *ouros* urine.] Reducing the volume of urine *appl* hormone of posterior lobe of pituitary gland.

**antidromic** (ántīdrom'ik) *a.* [Gk. *anti* against; *dromos* running.] Contrary to normal direction *appl.* conduction of impulse along axon towards body of nerve cell *anti-dromous* *appl* stipules with fused outer margins.

**antidromy** (ántīdromī) *n.* [Gk. *anti* against *dromos* running.] Condition of spiral phyllotaxis with genetic spiral changing direction after each cycle.

**anti-enzyme** (án'tīēnzī'm) *n.* [Gk. *anti* against *en* with *zyme* leaven.] A substance which retards or stops enzyme activity.

**antigen** (án'tījēn) *n.* [Gk. *anti* against *genes* birth.] Substance which causes a series of physiologico-chemical changes resulting in formation of antibodies.

**antigeny**—sexual dimorphism.

**antihelix** (án'tīhē'lik) *n.* [Gk. *anti* against *helix* a convolution.] The curved prominence in front of helix of ear.

**antihormones** (án'tīhōr'mōnz) *n. pl.* [Gk. *anti* against *hormas* to excite.] Substances which prevent the effect of hormones *chalooses*, *q.v.*

**antimeres** (án'tímérs) *n* *pl* [Gk. *anti* opposite *meros* part.] Corresponding parts as left and right limbs of a bilaterally symmetrical animal series of equal radial parts of a radially symmetrical animal.

**antimereuritic** (án'tínúrit'ík) *a*. [Gk. *anti* against; *meros* nerve.] *Appl* vitamin B<sub>1</sub> lack of which causes polyneuritis.

**antipain** (án'típéin) *n* [Gk. *anti* against *páris* digestion] A stomach secretion which prevents action of pepsin on tissue proteins.

**antiperistalsis** (án'tipérístáls) *n* [Gk. *anti* against *pérí* around *stálsis* contraction.] Reversed peristalsis peristaltic action in postero-anterior direction.

**antipetalous** (án'tipét'álús) *a*. [Gk. *anti* opposite *pétalon* petal.] With stamens opposite petals.

**antipodal** (án'tip'ódál) *a*. [Gk. *anti* against *pódus* foot.] *Appl* group of three cells at chalazal end of embryo-mac *appl* cone f astral rays opposite spindle fibres.

**antipygidial** (án'tip'íd'ál) *a*. [Gk. *anti*, against *pygidion*, narrow rump.] *Appl* bristles of seventh abdominal segment which extend to pygidium, in flies.

**antirachitic** (án'tirák'tík) *a*. [Gk. *anti* against *ráchis* spine.] *Appl* vitamin D lack of which causes rickets.

**antiscorbuti** (án'tískórbú'tík) [Gk. *anti* against L.L. *scorbutus* scurvy] *Appl* vitamin C lack of which causes scurvy

**antisepalous** (án'tisép'álús) *a*. [Gk. *anti* opposite *F* *sepala* from L. *separare* to separate.] With stamens opposite sepals.

**antisepti** (án'tisép'tík) *a*. [Gk. *anti*, against *sepsis* putrefaction] Preventing putrefaction. *n*. A substance which destroys harmful micro-organisms.

**antispadix** (án'trípá'diks) *n*. [Gk. *anti* against *spadix* palm branch.] A group of four modified tentacles in internal lateral lobes of Nautilus.

**antisquama** (án'tískwá'sá) *n* [Gk. *anti* against L. *squama* scale.] Basal lobe next squama of insect wing squama alaris or antilegula.

**antistyle** (án'tístál) *n*. [Gk. *anti* against; L. *stilus* prickler.] Basal projection of stylifer in certain insects.

**antilegula** (án'tilé'gúla) *n*. [Gk. *anti* against L. *legula*, tile.] Antisquama, *g*.*g*

**antithetic** (án'tithét'ík) *a*. [Gk. *antithesis* opposition.] *Appl* alternation of diploid and haploid generations or of sporophyte and gametophyte generations.

**antithrombin** (án'tithróm'bín) *n*. [Gk. *anti* against *thrombus* clot] A substance as formed in liver which prevents clotting of blood.

**antitoxin** (án'títók'sín) *n*. [Gk. *anti* against *toxikon*, poison.] A substance or antibody which neutralises or breaks toxin.

**antitragus** (án'titrá'gús) *n*. [Gk. *anti* against, *tragus*, goat.] Prominence opposite tragus of external ear

**antitrochanter** (án'titrókín'tér) *n*. [Gk. *anti* against *trochanter* a runner] In birds an articular surface on ilium against which trochanter of femur plays.

**antitropio** (án'titróp'ík) *a*. [Gk. *anti* against *trope* turn.] Turned or arranged in opposite directions arranged to form bilaterally symmetric pairs, as ribs of opposite sides of syntropic.

**antitropous** (án'tiróp'ús) *a*. [Gk. *anti* against *trope* turn.] Inverted; *appl* embryos with radicle directed away from hilum antitropal.

**antilla** (án'tílá) *n*. [L. *antilla* pump.] The spiral sectorial proboscis of Lepidoptera.

**antorbital** (ántór'bítál) *a*. [L. *anti* before *orbis* circle.] Situated in front of orbit *appl* bone, cartilage, process.

**antrum** (án'trúm) *n*. [L. *antrum* cavity] A cavity or sinus e.g. maxillary sinus, cavity of pylorus.

- anurous (ânû rûs) *a.* [Gk. *a*, without *our* tail.] Tailless.
- anus (ânûs) *n.* [L. *anus* anus] Posterior opening of alimentary canal.
- aorta (âb 'tâ) *n.* [Gk. *aorta* the great artery] The great trunk artery which carries pure blood to the body through arteries and their branches.
- aortic (âûr'tik) *a.* [Gk. *aorta* the great artery] *Part* aorta *appl.* arch hiatus isthmus, lymph glands, semilunar valves etc.
- aortic bodies—two small masses of chromaffin cells in capillary plexus, one on each side of foetal abdominal aorta, being part of system for controlling oxygen content and acidity of blood Zucker kandel's bodies.
- apatetic (âp'âit'ik) *a.* [Gk. *apaisthos* fallacious] *Appl.* misleading coloration.
- aperispermic (âpér'âpér'mik) *a.* [Gk. *a* without *per* around *sperma*, seed.] *Appl.* seeds without nutritive tissue.
- apertura piriformis,—ant rio nasal aperture of skull.
- petalous (âpét'âlûs) *a.* [Gk. *a*, without *petalo* petal.] Without petals monoclamydeous.
- apex (â pèks) *n.* [L. *apex* summit.] Tip or summit as of lungs, heart, nose styloid process of fibula tip of epacne in Dinoflagellate wing tip in insects.
- phalapterous (âf'ânip tertûs) *a.* [Gk. *aphanes* unseen *pteron* wing] Apparently without wings.
- aphiotropism (âf'iot'rôpizm) [Gk. *apo* way *hesios* sum *trope* turn.] Tendency to turn away from light phototropism.
- aphlebia (âf'eb yâ) *n.* [Gk. without *phlebo* vein.] Lateral outgrowth from base of frond-stalk in certain ferns.
- aphodal (âf'ôdâl) *a.* [Gk. *apo* away *hodos* path] *Appl.* type of canal system in sponges.
- aphodus (âf'ôdûs) *n.* [Gk. *aphodos* departure] The short tube leading

- from flagellate chamber t excurrent canal in a type of canal system in sponges.
- aphotic (âf'ô'uk) *a.* [Gk. *a*, without *phos* light.] *Part.* absence of light *appl.* zone of deep sea where daylight fails to penetrate *Opp* photic.
- aphyllous (âf'ilûs) *a.* [Gk. *a*, without *phyllon*, leaf.] Without foliage leaves.
- aphyllous (âf'ilû) *n.* [Gk. *a* without; *phyllon* leaf.] Suppression or absence of leaves.
- apical (âp'ikâl) *a.* [L. *apex* summit.] At tip or summit *part* distal end *appl.* cell at tip f growing point *appl.* meristem *appl.* style arising from summit of ovary *appl.* dominance of terminal bud *appl.* aboral plates of echinoderms *appl.* neural plate of trochophore and tornaria.
- apiculate (âpik'ûlûs) *a.* [Dim of L. *apex* summit.] Forming abruptly to small tip as leaf
- apiculus (âpik'ûlûs) *n.* [Dim of L. *apex* summit.] A small apical termination, as in some protozoa, = of certain spores reflexed portion of antennal club in some Lepid ptera.
- apilary (âp'ilâr) *a.* [Gk. *a* not *phlo* felt cap] Having upper lip wanting or suppressed in corolla.
- apitoxin (âpitôk'sîn) *n.* [L. *apis* bee Gk. *saxitoxin* poison.] Main toxic fraction f bee venom.
- apituitarism (âp'itû'târizm) *n.* [L. *a* away *pituita* phlegm.] Absence or deficiency of pituitary gland secretion hypophyphism.
- apiental (âp'lânt'âl) *n.* [L. *a* way *placenta* flat cake.] Having no placenta, as monotremes.
- aplanogametangium (âplân ôgâm'bân jûm) *n.* [Gk. *a* not *planos* wandering *gametes* spouse; *ang* *geron* vessel.] Cell in which aplanogametes are formed.
- aplanogamete (âplân ôgâm'êt) [Gk. *a* not *planos* wandering; *gametes* spouse.] A non-motile conjugating germ-cell f various plants and animals.

planospor (*áplán'ópōr*) *n.* [Gk. *a* not *planos* wandering *spore* seed.] A non-motile resting spore of algae an encysted spore of fungi planoplastid. *Opp* planospore.

plasia (*áplázē*) *n.* [Gk. *a* without *plassein* to mould.] Arrested development non-development.

pleroti (*áplērō'tik*) *n.* [Gk. *a* not *plerous* to fill.] Not entirely filling space *appl.* oospore not extended to oogonal wall. *Opp* plerotic.

pleperist matous (*áp'lopēr'ístēm átrōs*) *n.* [Gk. *eplos* single *peri* around *stoma* mouth.] Having peristome with one row of teeth, as mosses.

plestemonous (*áp'lōstēm'ōnōs*) *n.* [Gk. *eplos* single *stemon*, stamen, staminal thread.] With a single row of stamens.

pnatic (*áp'nō'tik*) *n.* [Gk. *a*, without *pnastēs* breath.] With spiracles closed or absent *appl.* aquatic larvae of certain insects.

p bloti (*áp'pblōt'ik*) *n.* [Gk. *apo* away *blos* life.] Causing or *peri* decrease in vital energy of cells or tissues *peri.* apobiosis or physiological death, *opp* death of entire body

apocarpous (*áp'ókár'pōs*) *n.* [Gk. *apo* way; *karpas* fruit.] Having separate or partially united carpels. *Opp.* syncarpous.

poecarpy —apocarpous condition.

apochlorosis (*áp'ókliōrō'sis*) *n.* [Gk. *apo* away *chloros* green.] The absence of chlorophyll in Flagellata.

poerin (*áp'ōkrin*) *n.* [Gk. *apo* away *kromai*, to separate.] *Appl.* glands secreting only part of cell contents of holocrine merocrine.

apocyte (*áp'ōtē*) *n.* [Gk. *apo* away *kytos* hollow] A multinucleate cell a plurinucleate mass of protoplasm.

apodal (*áp'ōdāl*) podous (*áp'ōdōs*) *n.* [Gk. *a*, without *podus* foot.]

Having no feet without ventral fin.

apodema (*áp'ōdēmā*) *n.* [Gk. *apo* away *demas* body] An internal skeletal projection in Arthropoda apodeme.

apo-enzyme (*áp'ōēn'zim*) *n.* [Gk. *apo* away *en* in *zyme* leaven.] Specific protein part of an enzyme, requiring co-enzyme for action.

apogamy (*áp'ōgāmī*) *n.* [Gk. *apo* away *gamos* marriage.] Reproduction without intervention of sexual organs.

pagotropic (*áp'ōt'ōtrōp'ik*) *n.* [Gk. *apo* away *paid* earth; *trope* turn.] Turning away from the earth geotropic.

apogeotropism (*áp'ōt'ōt'rōp'izm*) *n.* [Gk. *apo* away; *paid* earth *trope* turn.] Tendency to act contrarily to law of gravity negative geotropism.

polegami (*áp'ōlēgām'ik*) *n.* [Gk. *epolegein*, to choose, *gamos* marriage.] *Appl.* mating associated with sexual selection.

apomeiosis (*áp'ōmēō'sis*) *n.* [Gk. *apo* away *meion* smaller] Sporogenesis without haploids.

apomict (*áp'ōmikt*) *n.* [Gk. *apo* away *miktos* mixed.] A biotype resulting from apogamy and vegetative propagation.

apomixis (*áp'ōmīk'sis*) *n.* [Gk. *apo* way *mixis* a mixing] A reproductive anomaly in plants akin to parthenogenesis, but including development from cells other than ovules. *Opp* amphimixis.

ponerosis (*áp'onērō'sis*) *n.* [Gk. *apo* from *neuron* sinew] The flattened tendon for insertion of or membrane investing certain muscles.

apopetalous (*áp'ōpēt'altōs*) *n.* [Gk. *apo* way *petalon*, leaf] With free petals of apetalous.

apophyllous (*áp'ōfil'ōs*) *n.* [Gk. *apo* away *phylon* leaf.] *Appl.* the parts of single perianth whorl when they are free leaves.

**apophysis** (ápó'fízis) *n.* [Gk. *apo* away *physis* to grow] Process from a bone, usually for muscle attachment endosternite or sternal apodeme swelling beneath reproductive structure on fungal hyphae photosynthetic region forming swelling at base of capsule in some mosses small protuberance at apex of ovuliferous scale in pine

**apoplasmodial** (áp'óplásmó díál) *a.* [Gk. *apo* away *plasma* something moulded.] Not forming typical plasmodium

**apophysis** (áp'ó'pí) *n.* [Gk. *apo* away *physis* gate.] Exhalant pore of sponge.

**asporogamy** (áp'ó'róg á'mí) *n.* [Gk. *a* without *spora* channel *gamos* marriage.] Fertilisation without entry of pollen-tube through micropyle of ovul *app* porogamy

**porrhysis** (áp'ó'r'íás) *n.* *phs* [Gk. *porrhaino* to flow away] Exhalant canals in sponges *app* epurhysis

**posematic** (áp'ó'sémát'ík) *a.* [Gk. *apo* away *sema*, signal.] *App* warning colours which serve to frighten way enemies.

**asporogony** (áp'ó'spóróg oní) *n.* [Gk. *apo* away *spora* seed *gamos* birth.] Absence of porogony

**pospory** (áp'ó's pó'rí) *n.* [Gk. *apo* away *spora* seed.] Production of gametophyte from a sporophyte without intervention of spore formation.

**postaxis** (áp'ó'r'íásis) *n.* [Gk. *apo* away *axis* standing] Condition of boormal growth of axis which thereby causes separation of perianth whorls from on another

**postrophe** (áp'ó's'trófē) [Gk. *apo* away *strophe* turn.] Arrangement of chloroplasts along lateral walls of leaf cells.

**apothecium** (áp'ó'thē síúm -shíúm) *n.* [Gk. *apo* away *thēke* cup] A cup-shaped ascocarp ascocarp of lichens

**apotome** (áp'ó'tóm) *n.* [Gk. *apo* away *teme* a cutting] A part appearing as if cut off as from episternum, trochanter etc., in Arthropoda.

**apotracheal** (áp'ó'trá'kēál) *a.* [Gk. *apo* away *L. trachea* windpipe.] With xylem parenchyma independent of vessels or dispersed *app* wood.

**apotropous** (áp'ó'trópús) *a.* [Gk. *apo* away *trope* turn.] Anatrofal and with ventrally situated raphe.

**apotype**—hypotype *q.v.*

**apparato reticularis**,—see Golgi complex.

**appendage** (áp'én dēj) *n.* [L. *ad* to; *pendere* to hang] An organ or part attached to a trunk, as a limb branch, etc. a hyphal or rigid structure for attachment or detachment of perithecium to or from mycelium varying in structure and function in different Ascomycetes.

**appendices colli** (áp'én dí'stē kó'í) *n.* *phs* [L. *ad* to *pendere* to hang *collum* neck.] Exterior throat ppendages or tassels of goat sheep pig etc.

**ppe dicular** (áp'éndík'úliár) *a.* [L. *ad* to *pendere* to hang] *Pert* appendages *app* skeleton of limbs, *app* axial skeleton *pert* vermiform ppendix *app* artery

**ppendicular** (áp'éndík'úliár) *a.* [L. *ad* to *pendere* to hang] H ving small ppendage as a stamen or filament.

**appe dix** (áp'én díks) *n.* **appe dicae** (áp'én dí'stē) *phs* [L. *ad* to *pendere* to hang] An outgrowth, especially th vermiform append

**pplanat** (áp'í'ándí) *a.* [L. *ad* to *planatus* flattened.] Flattened

**apposition** (áp'ó'zish ún) *n.* [L. *ad* to *ponere* to place.] The formation of successive layers in growth of cell wall of intussusception.

**appressorium** (áp'résó'ríúm) *n.* [L. *ad* to *pressare* to press.] Adhesive disc, as of haustorium or sucker

proterodont (prōtērōdōnt) *a.* [Gk. *a* without *proteros* first; *odous* tooth.] Having no premaxillary teeth.

apteria (āptērīa) *n. plu.* [Gk. *a*, without *pteron* wing.] Naked or down-covered surfaces between pterylae or feather-tracts.

apterous (āptērūs) *a.* [Gk. without; *pteron* wing.] Wingless having no wing-like expansions on stems or petioles exalate.

apterygial (āptērījīāl) *a.* [Gk. *a*, without *pterygion* *dim* of *pteron* wing.] Wingless without fins.

apterygoteous (āptērīgōtūs) *a.* [Gk. *a*, without *pterygotes* winged.] Resembling or *part.* primitive wingless insects.

aptych *a* (āptīkūs) *n.* [Gk. *a* without *ptyche* fold.] A bony or calcareous structure, possibly an operculum, of ammonites.

apyrene (āpīrēn) *a.* [Gk. *a*, not *pyren*, fruit-stone.] *Appl.* spermatose lacking nucleus of eupyrene, oligopyrene seedless, *appl.* certain cultivated fruits.

aquati (ākwtītk) *a.* [L. *aqua*, water.] *Part.* water living in or frequenting water *n.* An aquatic plant.

aqueduct (āk'wēdūkt) *n.* [L. *aqua*, water *ducere* to lead.] A channel passage as that of cochlea, and of vestibule of ear *aqueductus*.

aqueduct of Sylvius [*N. de Bell* or *Sylvius* Flemish anatomist].—cerebral aqueduct or aqueduct of the midbrain or tier connecting third and fourth ventricle mesencephalon.

aqueous (āk'wētūs) *a.* [L. *aqua*, water.] Watery *appl.* humour fluid occupying space between lens and cornea *appl.* tissue consisting of thin-walled watery parenchymatous cells.

arachnactis (ārāknāktīs) *a.* [Gk. *arachne* spider *aktis* ray]

Larval stage of ceratanthid *Zoantharia*.

arachnid (ārāknīd) *a.* [Gk. *arachne* spider] Spiderlike *part.* spiders.

arachnidium (ārāknīd'ium) *n.* [Gk. *arachne* spider *idion* *dim*] The spinning apparatus of a spider including spinning-glands and spinnerets.

arachnoid (ārāknōīd) *a.* [Gk. *arachne* spider cobweb *idion* form.] *Part.* or resembling spider like cobweb consisting of fine entangled hairs *appl.* the thin membrane between dura and pia mater *n.* The rachnoid membrane.

arachnoidaeal (ārāknōīdēāl) *a.* [Gk. *arachne* cobweb *idion* form.] *Part.* the arachnoid: *appl.* granulations: Pachionian bodies, *q.v.*

arbecoid,—see diademoid.

arborescent (ār'bōrēsēnt) *a.* [L. *arbor* growing like a tree.] Branched like tree.

arborisation (ār'bōrīzē shūn) *n.* [L. *arbor* tree.] Tree-like branching as of nerve cell processes: arborescence.

arboroid (ār'bōrōīd) *a.* [L. *arbor* tree Gk. *idion* like] Tree-like, designating general structure of protozoan colony dendritic.

arbor vita (ār'bōr vītē) *n.* [L. *arbor* tree *vita*, life.] The tree of life *appl.* arborescent appearance of cerebellum in section.

arbuscl (ār'būsl) *n.* [L. *arbuscula*, shrub.] A tree-like small shrub or dwarf tree a branched haustorium, as in certain fungi *arbuscula*.

arbuscular (ār'būs'kulār) *a.* [L. *arbuscula*, shrub.] Resembling tree-like small shrub.

arcad (ār'kād) *n.* [L. *arcus* arch] A arched channel or passage bony arch, as supra- and infra-temporal arches in skull transverse canal connecting lateral canals, in Ascaris.

Archæan (ār'kē'an) *a.* [Gk. *archaios* ancient.] *Appl.* geological era before Palæozoic Pre-Cambrian.

**archaeocytes** (ár'kéésúls) *n. plu.* [Gk. *archaios* primitive *kytos* hollow] Cells arising from undifferentiated blastomeres and ultimately giving rise to germ-cells and gametes.

**archaeostomatous** (ár'kééstóm ástús) *a.* [Gk. *archaios* primitive *stoma*, mouth.] Having the blastopore persistent and forming mouth.

**Archaeozoic** (ár'kéésóó'ík) *a.* [Gk. *archaios* ancient *see* life.] First earliest geological era, age of unicellular life.

**arch-centra** (árch'sén'trá) *n. plu.* [L. *arcus* bow *centrum* centre.] Centra formed by fusion of basal growths of primary arcualia external to chordal sheath of chordacentra.

**archebiosis** (ár'kéébíós'is) *n.* [Gk. *arche* beginning *biosis* living] The origin of life archegenesis.

**archedictyon** (ár'kédíkt'íón) *n.* [Gk. *arche* beginning *dictyon* net.] An intervein network in wings of some primitive insects.

**archegoniophore** (ár'kégó'níófor) *n.* [Gk. *arche* beginning *gonos* off spring *phoros* to bear] Branches of bryophytes, or parts of fern prothall, bearing archegonia.

**archegonium** (ár'kégó'níóm) *n.* [Gk. *arche* beginning *gonos* offspring] A female gametangium in which oospheres are formed and in which the young plant begins development.

**arch ocephalon** (árk'énkéf'álon, -el) *n.* [Gk. *arche* beginning *enkephalos* brain.] The primitive forebrain or cerebrum.

**archenteron** (árkén'térón) *n.* [Gk. *arche* beginning *enteron* gut] The cavity of gastrula which forms primitive gut of embryo.

**archeo-**—**archeo-**

**arche pore** (ár'késpör) *n.* [Gk. *arche* beginning *spora* seed.] The tetrahedral or meristematic cell of a sporangium cell of an archesporium.

**arch sporium** (ár'késpó'ríóm) *n.* [Gk. *arche* beginning *spora*

seed.] A cell or mass of cells, dividing to form spore mother cells, or in liverworts, spore mother-cells and later forming cells.

**archetype**—**architype** *q.v.*

**archlamphaster** (ár'klám'fíls'tér) *n.* [Gk. *archi* first *amphi*, on both sides *aster* star] The amphister forming first or second polar body in maturation of ovum.

**archibenthic** (ár'kíben'thík) *a.* [Gk. *archi* first *benthos* depths of sea.] Pertaining to bottom of sea from edge of continental shelf to upper limit of abyssobenthic zone at depths of over 200 to 1000 metres.

**archiblast** (ár'kíblást) *n.* [Gk. *archi* first *blastos* bud.] Egg protoplasm.

**archiblastic** (ár'kíblás'tík) *a.* [Gk. *archi* first *blastos* bud.] Having total and equal segmentation.

**archiblastula** (ár'kíblás'túliá) *n.* [Gk. *archi* first *blastos* bud.] Typical hollow ball of cells derived from an egg with total and equal segmentation.

**archicarp** (ár'kíkárp) *n.* [Gk. *archi* first *karpos* fruit.] Spirally coiled region of thallus, or stalk bearing oogonium of certain fungi.

**archicerebrum** (ár'kíkérf'ébrúm) *n.* [Gk. *archi* first; L. *cerebrum*, brain.] The primitive brain, as the supra-oesophageal ganglia of higher invertebrates primary brain of arthropoda.

**archichlamydeous** (ár'kíklám'id'éús) *a.* [Gk. *archi* first *chlamys* cloak.] Having no petals, or having petals entirely separate from one another.

**archicoel** (ár'kíké) *n.* [Gk. *archi* first *koilos* hollow] The primary body-cavity or space between alimentary canal and ectoderm in development of various animals.

**archidictyon**,—*see* archedictyon.

**archig** *n. pl.* (ár'kíjén'éis) *n.* [Gk. *archi* first *gonos* descent.] Abiogenesis, *q.v.*

**archig** *ny.* (ár'kíj'óel) *n.* [Gk. *archi* first *gonos* begetting] The first origin of life.

- archinephric** (ár'kínēf'rik) *a.* [Gk. *archi* first; *nephros* kidney] *Appl.* duct into which pronephric tubules open *per.* archinephros.
- archinephridium** (ár'kínēf'id'íum) *n.* [Gk. *archi* first; *nephros* kidney *ídion* dist.] Excretory organ of certain larval invertebrates solenocyte, *q.v.*
- archinephros** (ár'kínēf'rós) *n.* [Gk. *archi* first; *nephros* kidney] The primitive kidney. Wolffian body.
- archipallium** (ár'kipál'íum) *n.* [Gk. *archi* first; *L. pallium* mantle.] The olfactory region of cerebral hemispheres, comprising olfactory bulbs and tubercles, pyriform lobes, hippocampus and fornix. *Opp.* neopallium.
- archiplasm** (ár'kiplásm) *n.* [Gk. *archi* first; *plasma*, mould.] The substance of attraction-sphere, astral rays, and spindle-fibres also archoplasm ktoplasm idiosome, *q.v.*
- archipterygium** (ár'kip'tér'íum) *n.* [Gk. *archi* first; *pterygion* little wing] Type of fin in which skeleton consists of elongated segmented central axis and two rows of joined rays.
- architomy** (ár'kit'óm) *n.* [Gk. *archi* first; *temno* cutting] Reproduction by fission with subsequent regeneration, in certain annelids *egg* paratomy.
- architype** (ár'kitíp) *n.* [Gk. *archi* first; *typos* type.] An original type from which others may be derived.
- Archoplasm,--archiplasm** *q.v.*
- Arco-centrous** (ár'kósn'trús) *a.* [*L. arcus* bow; *centrum*, centre.] *Appl.* vertebral column in which centres are mainly derived from arch tissue arco-centrous.
- arciferous** (ár'kíf'érús) *a.* [*L. arcus* bow; *fero* to carry] *Appl.* pectoral arch of toads, etc., where precoracoid and coracoid are separated and connected by arched epacoracoid.
- arciform** (ár'kí'fórm) *a.* [*L. arcus* bow; *forma*, shape.] Shaped like an arch or bow arcuous.

- arco-centrous** (ár'kósn'trús) *a.* [*L. arcus* bow; *centrum* centre.] *Appl.* vertebral column with inconspicuous chordal sheath and centra derived from arch tissue.
- arcoe-trium** (ár'kósn'trúm) *n.* [*L. arcus* bow; *centrum* centre.] A centrum formed from parts of neural and haemal arches.
- Arctogaea** (ár'kót's'á, -gá'yá) *n.* [Gk. *Aktis* Great Bear; *gáia* earth.] Zoogeographical area comprising Holarctic Ethiopian and Oriental regions.
- arcualla** (ár'kú'llá) *n.* *plu.* [*L. arcus* bow] Small cartilaginous piece, dorsal and ventral fused or free on vertebral column of fishes.
- arcuate** (ár'kú'té) *a.* [*L. arcus* bow] Curved or shaped like a bow.
- arculus** (ár'kú'ús) *n.* [*Dim.* of *L. arcus* bow] Arc formed by two wing veins of certain insects.
- ardellae** (árdél'lé) *n. plu.* [Gk. *ardelis* to sprinkle.] Small apothecia of certain lichens, having appearance of dust.
- area** (á'ré) *n.* [*L. arva* ground space.] A surface as *area opaca*, *area pellucida*, *area vasculosa*, etc. part enclosed by a raised ridge, as in *Polypora* region.
- arenaceous** (ár'én'á'shús) *a.* [*L. arena*, sand.] Having properties or appearance of sand sandy growing in sand.
- arenicolous** (ár'én'ik'ú'shús) *a.* [*L. arena*, sand; *colere* to inhabit.] Living in sand psammophilous.
- areola** (ár'ó'lá) *n.* [*L. areola* dim. of *arva* space.] A small coloured circle round ripple part of iris bordering pupil of eye one of small spaces or interstices of special kind of tissue area defined by cracks on surface of lichens poroids when surrounded by thickened margins; *areolula*, *q.v.*
- areolar** (ár'ó'lér) *a.* [*L. areola* small space.] Of or like an areola *per.* an areola.
- areolate** (ár'ó'lé) *a.* [*L. areola*, small space.] Divided into small areas defined by cracks or other margins.



are lation (ārēdā shūn) *n.* [L. *areola* small space] Areola pattern a network appearance as of cell margins in tissue.

areole (ārēd) *n.* [L. *areola* small space.] Areola *q.v.* space occupied by group of hairs or spines as in Cactus.

argentaffin (ārjēn'tāfin) *a.* [L. *argentum*, silver; *affinis* related.] Staining with silver salts, *appl.* cells argyrophil.

argenteal (ārjēn'tēl) *a.* [L. *argenteus* silvery.] *Appl.* layer of eye containing calcic crystals.

argenteous (ārjēn'tēus) *a.* [L. *argenteus* silvery.] Like silver

argenteum (ārjēn'tēm) *n.* [L. *argenteus* silvery.] A dermal reflecting tissue layer of indocytes without chromatophores in fishes.

arginase (ārjēdās) *n.*—a liver enzyme acting on the amino-acid arginine (C<sub>6</sub>H<sub>12</sub> O N<sub>4</sub>) urea and ornithine being separated by hydrolysis.

argyrophil (ārjēn'tēl) *a.* [Gk. *argyros* silver *philes* loving] Staining with silver salts, *appl.* fibres of reticular tissue argent

aff. argyrophil *appl.* basal bodies or blepharoplasts.

aril (ārēl) *n.* [F. *arille* Sp. *arilla* small hoop] A additional integument formed on some seeds after fertilisation.

arillode (ārēlōd) *n.* [F. *arille* hoop Gk. *oides* like] A false arillus arising from region of micropyle as an expansion of exostome.

arillus (ārēl'ūs) *n.* [L.L. *arilla* aril] An aril *q.v.*

arista (ārēstā) *n.* [L. *arista* wn.] Awn long-pointed process as in many grasses a bristle borne by antenna of many brachycerous Diptera.

aristat (ārēstāt) *a.* [L. *arista* wn.] Provided with awns, or with well-developed bristly *appl.* insect antenna.

aristogenesis (ārēstōjēn ēsis) *n.* [Gk. *aristos* best *genesis* descent.] Process of evolving new biomechanism from the germ plasma creative

principle or potentiality in origin of species.

aristogenic, —eugenic *q.v.*

Aristotle's lantern,—masticating apparatus of sea-urchin.

arkyochrome (ār'kōkrōm) *n.* [Gk. *arkys* net *chroma*, colour] With Nissl granules arranged like net work *appl.* certain neurones.

armature (ār'mātur) *n.* [L. *armatura* armour] Anything which serves to defend as hairs, prickles, thorns spines stings, etc.

arollium (ār'ōliūm) *n.* [Gk. *areole* protection.] Median lobe of pad on praetarsus of many insects.

aromorph (ār'rōmōr) *n.* [Gk. *aeris*, to raise *morphē* form.] A character or structure resulting from aromorphosis.

aromorphosis (ār'rōmōr'fōsis) *n.* [Gk. *aeris* to raise *morphē* shape] Evolutionary change towards an increase in life energy e.g. evolution of a biting mouth skeleton from gill arches *appl.* evolution of merely adaptational character

array (ārē) *n.* [F. *array* retinue.] Arrangement in order of magnitude.

arrect (ārēkt) *a.* [L. *erectus* set upright] Upright erect.

arrector's pili, —bundles of non-striped muscular fibres associated with hair follicles,—contraction causing hair to stand on end. *Sing.* arrector pil.

arthenogenic (ārēn'ōjēn'tik) *a.* [Gk. *arthen* male *genesis* offspring] Producing offspring preponderantly or entirely male.

arthenoid (ārēn'ōid) *a.* [Gk. *arthen*, male *oides* form] Exhibiting male characteristics, as genetically female animals undergoing sex reversal.

arthenoplasm (ārēn'ōplāzm) *n.* [Gk. *arthen* male *plasma*, mould.] Male plasma, i reference to theory that all protoplasm consists of arthenoplasm and thelyplasm.

arthenotoky (ārēn'ōtō'kē) *n.* [Gk. *arthen* male *tokos* birth.] Parthenogenetic production of males.

**arthostia** (árthost'ia) *n.* [Gk. *arthostia*, ill health.] A normal condition or trend in development or evolution which resembles a diseased condition, e.g. extreme size in certain extinct vertebrates resembling over action of pituitary gland.

**artefact** (ár'téfákt) *n.* [L. *ars* art; *factus* made.] An appearance, or apparent structure, due to preparation and not natural.

**art ukrels** (ár'ténkrh) *n.* [Ger *Art* species *Kreis* circle.] Complex of species which replace one another geographically - super species.

**arterial** (ár'téríál) *a.* [L. *arteria*, artery] *Part* an artery or system of channels by which blood moves to body from heart.

**arteriole** (ár'téríól) *n.* [L. *arteriola* small artery] A small artery

**artery** (ár'térí) *n.* [L. *arteria*, artery] A canal which conveys blood from heart to body

**arthriti** (árthrit'ik) *a.* [Gk. *arthron* joint.] *Part* or at joints.

**arthrobranchiae** (árthrob'ráng'kie) *n. plu* [Gk. *arthron* joint *brángkhia*, gills.] Joint-gills, arising at junction of thoracic pyridage with trunk, of Arthropoda.

**arthrodia** (árthró'dia) *n.* [Gk. *arthron*, joint.] A joint admitting of only gliding movements.

**arthrodial** (árthró'díál) *a.* [Gk. *arthron* joint.] *Appl* articular membranes connecting thoracic appendages with trunk as in arthropoda.

**arthrogenous** (árthrój'énis) *a.* [Gk. *arthron* joint *gennao* descent.] Formed as separate joint, as spores developed from separated portions of plant.

**arthromere** (árthrómér) *n.* [Gk. *arthron*, joint *meros* part.] An arthropod body-segment or somite.

**arthropod** (árthrópód) *a.* [Gk. *arthron* joint *pous* foot.] With jointed legs *Part* phylum including Crustacea, Myriopoda, Insecta, Arachnoida.

**arthropt rous** (árthrópt'éntis) *a.* [Gk

**arthron** joint *pteron* wing] Having jointed fin-rays as fishes.

**arthrospore** (árth'rópó) *n.* [Gk. *arthron* joint *sporos* seed.] A resting moniliform bacterial cell a cell formed by segmentation of hypha.

**arthrosterigmata** (árthrostérig'mátá) *n. plu* [Gk. *arthron* joint *sterigma* support.] Jointed sterigmata.

**arthrostracous** (árthrost'rákús) *a.* [Gk. *arthron* joint *astrakon* shell.] Having a segmented shell.

**arthrot rgal** (árthrotér'gál) *a.* [Gk. *arthron* joint L. *tergum* back.] *Appl* median dorsal flexor of opisthosoma in Limulus.

**articular** (ár'tík'úlar) *a.* [L. *articulus* joint.] *Part* or situated at joint *Appl* cartilage, lamellae, surface capsule, etc.

**articularis** genus, — subcervical muscle.

**articulated** (ár'tík'úlatéd) *a.* [L. *articulus* joint.] Jointed; articulates separating easily at certain points.

**articulation** (ár'tík'úláshón) *n.* [L. *articulus* joint.] A joint between bones or segments, between segments of stem.

**artifact**,—**artefact**, *g.v*

**artiodactyl** (ár'tódákt'ul) *a.* [Gk. *artios* even *dactylos* finger] Having an even number of digits.

**aryta** old (ár'té'noid) *a.* [Gk. *arytátes*, ladle *oides* form.] Pitcher like *Appl* two cartilages at back of larynx also glands, muscles, etc.

**ascl**,—*plu* of *sacus*

**ascidial** (áskid'íál) *a.* [Gk. *askidion* div. of *askos* bag] Sac-like *Appl* certain specialised, or abnormal, floral and foliage leaves *Part* ascidium.

**ascidian** (áskid'íán) *a.* [Gk. *askidion*, little bag] Like an ascidian or sea-squirrel.

**ascidium** (áskid'íüm) *n.* [Gk. *askidion*, little bag] A pitcher-leaf as in Nepenthes.

**ascigerous** (âsf' erîs) *a.* [Gk. *askos* bag *L. gerere* to bear] Bearing asci as certain hyphae in fungi asciferous.

**ascocarp** (âs'kôkârp) *n.* [Gk. *askos* bag *karpos* fruit.] Ascii with their protective covering sporocarp of Ascomycetes.

**ascogeous** (âskô) enîs) *n.* [Gk. *askos* bag *genes* producing] Producing asci *appl.* hyphae, cells.

**ascogonium** (âs'kôgô nîm) *n.* [Gk. *askos* bag *gonos* offspring] A specialized hyphal branch which gives rise to ascogenous hyphae or an ascus oogonium of Ascomycetes.

**ascoma** (âs'kôma) *n.* [Gk. *askoma*, leather padding] Disc-shaped ascocarp in certain fungi.

**ascophore** (âs'kôfôr) *n.* [Gk. *askos* bag *phoros* to bear] Ascocarp.

**ascorbic acid**,—pure vitamin C deficiency of which in diet causes dental disorders and scurvy hex uronic acid,  $C_6H_8O_6$ .

**ascospore** (âs'kôspôr) *n.* [Gk. *askos* bag *sporos* seed.] One of the spores produced in an ascus.

**ascus** (âs'kûs) *n.* [Gk. *askos* bag] A membranous spore-sac, as of Ascomycetes.

**asemi** (âs'émik) *a.* [Gk. *asemos* without sign.] Without markings.

**aseptat** (âs'p'ât) *a.* [L. *a* not *septum* partition.] Without any septum.

**asexual** (âs'ek sîl) *a.* [Gk. *a* without *L. sexus* sex.] Having no apparent sexual organs parthenogenetic or vegetative as *appl.* reproduction.

**asiph nate** (âs'îf'nât) *a.* [L. not *sipho* tube.] *Appl.* larvae whose respiratory tubes open directly to exterior.

**asparagin** (âspâr'âjên gî) *n.* [Gk. *asparagus* asparagus.] A compound first detected in asparagus, formed from amino-acids in leguminous and other seeds of importance in nitrogen metabolism of plants  $C_4H_8O_2N$ .

**aspect** (â p'ekt) [L. *aspicere* to

look toward.] Direction facing part of a surface appearance or look seasonal appearance.

**aspection** (âsp'ek shûn) *n.* [L. *aspicere* to look toward.] Seasonal succession of phytological and zoological phenomena.

**asperity** (âsp'êr'it) *n.* [L. *asper* rough.] Roughness, as on a leaf.

**asplanchnic** (âsplângk'nîk) *a.* [Gk. *a* without; *splanchnos* viscera.] Without alimentary canal.

**asporocystid** (âspô rôs'it'id) *a.* [Gk. *a* not *sporos* seed; *kystis* bladder *idion* own] *Appl.* oocyst of Sporozoa when zygote divides into sporozoites without sporocyst formation.

**asporous** (âspô'rûs) *a.* [Gk. *a* without *sporos* seed.] Having no spores.

**assimilation** (âsîm'îlâ shûn) *n.* [L. *ad* to *milis* like.] Conversion into protoplasm of ingested and digested nutrient material anabolism.

**association** (âsô sîl shûn) *n.* [L. *ad*, to *secus* fellow] A plant community forming a division of a formation or larger unit of vegetation as of tundra, grassland, forest, and characterized by dominant species; adherence of gregarines without fusion of nuclei *appl.* fibres connecting white matter of interior of brain with cortex *appl.* neurons with intersegmental axons.

**associes** (âsô'sîz) *n.* [L. *ad* to *secus* fellow] An association representing a stage in the process of succession.

**astax** (âs'tâstn) *n.* [L. *astacus* crayfish.] Carotenoid pigment of certain crustaceans, echinoderms, and fishes astacin  $C_{40}H_{56}O$ .

**astaxanthin** (âs'tâstân'thî) *n.* [L. *astacus* crayfish Gk. *xanthos* yellow] An animal carotenoid derived from ingested plant carotenoids, in chromoplasts of certain flagellates, also combining with proteins to form pigments, as of crustaceans  $C_{40}H_{56}O_6$ .

**astile** (âst'îlik) *a.* [Gk. *a* without *stela* pillar] Not possessing stiel

**ast ly** (ást'li) *n*. [Gk. *a*, without *stēle* pillar] Absence of a central cylinder axis, or stele.

**aster** (ás'tēr) *n*. [Gk. *aster* star] The star-shaped achromatic structure surrounding centrosome during mitosis; star-shaped arrangement of chromosomes during mitosis.

**asterion** (ást'ēr'ōn) *n*. [Gk. *aster* star] The region of posterolateral fontanelle where lambdoid, parieto-mastoid, and occipito-mastoid sutures meet.

**asteriscus** (ás'tēr'is'kūs) *n*. [Gk. *asteriskos* dim. (aster star)] A small otolith in rudimentary cochlea of teleosts.

**asternal** (ást'ēr nāl) *a*. [L. *a* from *sternum* breastplate.] *Appl* ribs whose ventral ends do not join the sternum directly.

**asteroid** (ást'ēr'ōid) *a*. [Gk. *aster* star *ēidos* form.] Star-shaped *part.* star fish.

**asterospondylous** (ást'ēr'ōspōn dīlūs) *a*. [Gk. *aster* star *spōndylōs* vertebra.] Having centrum with radiating calcified cartilage also *asterospondylic*.

**astheni** (ást'hēn'ik) *a*. [Gk. *asthenos* feeble.] Weak tall and slender *leptomeres*.

**astogeny** (ást'ōj'ēn) *n*. [Gk. *astō* citizen *gēnes* descent.] The development of colony by budding.

**astomatous** (ást'ōm'atūs) *a*. [Gk. *a*, without *stoma*, mouth.] Not having a mouth without epidermic pores or stomata.

**astomous** (ást'ōm'ūs) [Gk. *a* without *stoma*, mouth.] Without stoma or line of dehiscence bursting irregularly.

**astragalus** (ást'rāg'alūs) *n*. [Gk. *astragalos* ankle-bone.] The talus, second largest tarsal bone in man tarsal bone in vertebrates.

**astroblast** (ást'rōblāst) *n*. [Gk. *aster* star; *blastos* bud.] A cell giving rise to protoplasmic or to fibrillar astrocytes.

**astrocentro** (ás'trōcēn'tē) *n*. [L. *aster* star *centrum* centre.] Centrosome.

**astrocyt** (ást'rōst) *n*. [Gk. *aster* star *kytos* hollow] A common neuroglia cell; astroglia; macroglia Delters' cell a neuroglial cell with branching protoplasmic processes in grey matter a fibrillar or peder cell in white matter.

**astropodia** (ást'rōpō dīa) *n. pl.* [Gk. *aster* star *pous* foot.] Fine unbranched radiating pseudopodia, as in Heliozoa and some Radiolaria.

**astropyle** (ást'rōp'il, pī'le) *n*. [Gk. *aster* star *pylē* gate.] Chief aperture of central capsule, in certain Radiolaria.

**astroscleroid** (ást'rōsklē'ōid) *n*. [Gk. *aster* star *sklēros* hard *ēidos* form.] A multiradiate scleroid or stone cell spiculate or ophiuroid cell.

**astrosphere** (ást'rōsfēr) *n*. [Gk. *aster* star *sphaera* ball.] Central mass of aster without rays *aster* exclusive of centrosome *astral* sphere.

**asymmetrical** (ásimētr'ikl) *a*. [Gk. *asymmetros* disproportionate.] *Part.* want of symmetry having two sides unlike or disproportionate *appl.* structures or organs which cannot be divided into similar halves by any plane *asymmetric*.

**synapsis** (sīnāp'sis) *n*. [Gk. *a* not *synapsis* union.] Absence of pairing of chromosomes in meiosis *asynapsis*.

**tactostele** (tākt'ōstēl'ē) *n*. [Gk. *taktos* irregular *stēle* post.] A complex stele having bundles scattered in the ground tissue, as in monocotyledons.

**tavism** (át'ávizm) *n*. [L. *avertus* ancestor] Reversion, occurrence of an ancestral characteristic not observed in more immediate progenitors.

**staviati** (át'áv'it'ik) *a*. [L. *avertus* ancestor] *Part.* marked by or tending to atavism.

**ateleosis** (átelēō'sis) *n* [Gk. *ateles* imperfect.] Dwarfism where individual is a miniature adult of achondroplasia.

**atelia** (átel'ia) *n*. [Gk. *ateles* ineffectual.] The apparent uselessness of a character of unknown biological significance incomplete development.

**ateliomiti** (átelēōm'it'i) *a*. [Gk. *a*, not *telas* end *mitos* thread.] *Appl* other than terminal attachment of chromosome to spindle

**athalamous** (áthál'amō's) *a*. [Gk. *a* without *thalamos* inner room.] Lacking a thalamus.

**athrocytosis** (áth rō'stō'sis) *n* [Gk. *athroos* collected *kytos* hollow] The capacity of cells to selectively absorb and retain solid particles in suspension, as dyas.

**atlanto-occipital**,—occipito-atlantal

**atlas** (át'las) *n*. [Gk. *Atlas* Titan.] The first cervical vertebra.

**atokous** (át'ókō's) *a*. [Gk. *atokos* childless.] Without offspring

**atoll** (át ol, ától') *n*. [Mal. *atoll*] A coral reef surrounding central lagoon.

**atopy** (át'ōp'i) *n*. [Gk. *atopia* unusual nature.] Idiosyncrasy genetic sensitivity to poisonous effects of particular antigens or atopens, as of certain proteins, pollen, etc.

**atretic** (át'rē'tik) *a*. [Gk. *a*, not *treis* perforated.] *Appl* vesicles resulting from degeneration of Graafian follicles, spurious corpora lutea.

**atrial** (át'rī'al) *a*. [L. *atrium* central room] *Pert* atrium *appl* cavity pore canal, siphon, lobes.

**trichic** (át'rī'kik) *a*. [Gk. not *trichis* hair] Having flagella *trichocous*

**atriocoelomi** (át'rīō'sēlōm'ik) *a*. [L. *atrium*, central room Gk. *koeloma* hollow] Connecting atrium and coelom *appl* funnels of certain function in Cephalochorda.

**atriopore** (át'rīōp'ēr) *n* [L. *atrium* central room *porus* channel] The opening from atrial cavity to

exterior in Cephalochorda spiracle i tadpole.

**atrioventricular** (át'rīōvēn'trīk'ulār) *a*. [L. *atrium* chamber *ventriculus* small cavity] *Pert*. atrium and ventricle of heart *appl* bundle groove node openings.

**atrium** (át'rīūm) *n* [L. *atrium* chamber] Anterior cavity of heart tympanic cavity a division of the vestibule at end of broochiole chamber surrounding pharynx in Tunicata and Cephalochorda.

**atrochal** (át rō'kal) *a*. [Gk. *a*, without *trochos* wheel.] Without preoral circlet of cilia *appl* trochophore when preoral circlet is absent and surface is uniformly ciliated.

**atropal**—atropous.

**atrophy** (át'rōf'i) *n* [Gk. *a*, without; *trophis* nourishment.] Emaciation diminution in size and function.

**atropous** (át rōp'ō's) *a*. [Gk. *a*, without *trope* turn.] *Appl* ovule in proper position, *a* not inverted.

**attachment**, the spindle attachment lasting fusion of two chromosomes.

**att nat d** (át'en átēd) *a*. [L. *attenuare* to thin.] Thinned reduced in density strength or pathogenic activity

**atterminal** (át'tēr'mī'al) *a*. [L. *ad* + *terminus* end.] Towards a terminal *appl* current directed toward thermal cross-section.

**attic** (át'ik) *n* [Gk. *attikos* Athenian] The epytympanic recess

**attraction-particle**,—centriole *q* **traction** sph re—centrosphere, *q*.

**auditory** (ód'tor'i) *a*. [L. *audire* to hear] *Pert* hearing apparatus. *appl* organ nucleus, ossicle capsule canal incus nerve, vesicle etc. *Pert* sense of hearing

**Auerbach's plexus** [L. *Auerbach* German anatomist]. A gangliated plexus of non-medullated nerve-fibres, found between the circular and longitudinal layers of muscular coat of small intestine plexus myentericus.

**augmentation** (óg'mēntā shūn) *n*. [L. *augere* + increase.] Increase in number of whorls of forals.

gmentor (ôgmén'tôr) *a.* [L. *augere* to increase] *Appl.* nerves rising from sympathetic system and acting on heart, with antagonistic relation to vagi accelerator

autophyte (ô'tôf'it) *n.* [Gk. *autem*, hollow way *phytos* plant.] A non-parasitic plant growing in hollow of another

aloist matous (ô'tôdôm'âtôm) *a.* [Gk. *oulos* to be *stoma*, mouth.] Having tubular mouth or snout

aural (ô'r'âl) *a.* [L. *auris* ear] *Part.* ear or bearing

auricle (ô't'ikl) *n.* [L. *auricula* small ear] Any ear-like lobed appendage the external ear atrium or anterior chamber of heart

auricula (ô'rik'ülä) *n.* [L. *auricula* small ear] An auricle

auricular (ô'rik'ülär) *n.* [L. *auricula*, small ear.] Ear covert of birds. *a. Part.* an auricle *appl.* artery nerve, tubercle vein.

auricularia (ô'rik'ülä'riä) *n.* [L. *auricula* small ear] A type of larva found among Holothuria.

auricularis (ô'rik'ülä'ris) *n.* [L. *auricula*, earlap.] Superior anterior posterior extrinsic muscles of the external ear

uriculate (ô'rik'ülät) *a.* [L. *auricula* small ear] Eared *appl.* leaf with expanded bases surrounding stem *appl.* leaf with lobes separate from rest of blade hastate-succled.

auriculo-auricular—*part.* or connecting auricle and ventricle of heart *appl.* bundle, valve.

uriform (ô'rifôrm) *a.* [L. *auris* ear *forma*, shape.] Resembling the external ear in shape, as shell of Haliotis.

urophore (ô'r'ôf'ôr) *n.* [L. *auris* ear; Gk. *phoros* to bear] An organ projecting from base of pneumostome of certain Siphonophora.

austral (ô't'räl) *a.* [L. *australis* southern.] *Appl.* or *part.* southern biogeographical region, or restricted to North America between transitional and tropical zones.

A strall (ô'sträl'än) *a.* [L. *auster* *trahis* southern.] *Appl.* or *part.* a zoogeographical region including Papua, Australia, New Zealand, and Pacific Islands.

autacoid (ô't'äköid) *n.* [Gk. *autos* self; *akos* remedy *oides* form.] Internal secretory hormone or chalone.

autarticular (ô't'ärtik'ülär) *n.* [Gk. *autos* self L. *articularis* joint.] Gonial *q.s.*

autacology (ô't'äköl'ôji) *n.* [Gk. *autos* self *oikos* household; *logos* discourse] The biological relations between a single species and its environment ecology of an individual organism auto-ecology

autobiology—kikobiology *q.s.*

ut blast (ô't'öbläst) *n.* [Gk. *autos* self *blastos* bud.] An independent micro-organism or cell.

utocarp (ô't'ökärp) *n.* [Gk. *autos* self *karpos* fruit.] Fruit resulting from self fertilization

autocatalyze (ô't'ökätäl'äiz) *n.* [Gk. *autos* self; *kata* down *lysis* loosening] Dissolution or reaction of a cell or substance due to influence of product or secretion of its own.

autochthonous (ô't'ök'thôn'üs) *a.* [Gk. *autos* self, *chthôn* ground] Aboriginal indigenous inherited or hereditary native *appl.* character traits originating within an organ as pulsation of excised heart formed where found. *Opp.* allochthonous.

tocoid,—autocoid *q.s.*

a tocyet (ô't'öüst) *n.* [Gk. *autos* self *kystis* bladder] A thick membrane formed by Neosporidia separating them from host tissues.

autodermalla (ô't'ödërmäl'lä) *n.* *phs.* [Gk. *autos* self *derma*, skin.] Dermal spicules with axial cross, within dermal membrane.

autodont (ô't'ödönt) *a.* [Gk. *autos* self *odous* tooth.] Designating or *part.* teeth not directly attached to jaws, as in cartilaginous fishes.

autoecious (ô'tsē'jūs) *a.* [Gk. *autos* self *oikos* house] Passing different stages of life history in the same host *appl.* parasitic fungi autoecious.

autogamous (ô'tôg'âmūs) *a.* [Gk. *autos* self *gamos* marriage] Self fertilizing *opp.* allogamous.

autogamy (ô'tôg'âmī) *n.* [Gk. *autos* self *gamos* marriage.] Self fertilization *opp.* allogamy conjugation of nuclei within a single cell conjugation of two protozoa originating from division of the same individual.

autogenesis (ô'tôjēn'êsis) *n.* [Gk. *autos* self *genesis* birth.] Spontaneous generation autogeny togeny

autogenetic (ô'tôjēnē'tīk) *a.* [Gk. *autos* self *genesis* birth.] Reproducing spontaneously as body-cells.

autogenic (ô'tôjēn'tīk) *a.* [Gk. *autos* self *genesis* to produce.] Caused by reactions of organisms themselves *appl.* plant succumons, *opp.* allogenic autogenic or spontaneous, *appl.* movements.

autogenous (ô'tôj'êntis) *a.* [Gk. *autos* self *gennō* producing] Produced in the same organism *appl.* enzymes *appl.* graft reimplanted in same animal *appl.* vaccine injected into same animal *appl.* variations of changes within chromosomes.

autogeny (ô'tôg'ênī) *n.* [Gk. *autos* self *gennō* offspring] Autogenesis, *q.v.*

aut heteroploid (ô'tôbēt'erôplôid) *n.* [Gk. *autos* self *heteros* other *plōos* ane-fold *eidos* form.] Heteroploid derived from single genome or multiplication of some of its chromosomes.

autoinfection (ô'tô'înfēk'shūn) *n.* [Gk. *auto* self *L. infecto* to taint.] Reinfection from host's own parasites.

autointoxication (ô'tô'întôk'shik'shūn) *n.* [Gk. *auto* self *L. in* in *Gk. karison* poison.] Reabsorption of toxic substances produced by the body  
tolysis (ô'tôl'îsis) *n.* [Gk. *auto*

self *lysis* loosing] Self-digestion cell or tissue disintegration by action of autogenous enzymes.

autolytic (ô'tôlīt'īk) *a.* [Gk. *autos* self *lysis* loosing] Causing or *part.* autolysis; *appl.* enzymes.

automixis (ô'tô'mīk'sis) *n.* [Gk. *autos* self *mixis* mingling] The union, in a cell, of chromatin derived from common parentage self fertilization.

aut narcosis (ô'tô'narkô'sis) *n.* [Gk. *autos* self *narkē* numbness.] State of being poisoned rendered dormant or arrested in growth owing to self produced carbon dioxide.

autonomic (ô'tô'nomīk) *a.* [Gk. *autos* self *nomos* law] Autonomously self governing spontaneous *appl.* the involuntary nervous system as whole comprising parasympathetic and sympathetic systems induced by internal stimuli as movements of development, growth unfolding etc *opp.* paratonic internal, *appl.* environment *opp.* choronomic.

autopalatine (ô'tôpāl'atin) *n.* [Gk. *autos* self *L. palatum* palate.] In a few teleosts, an ossification at anterior end of pterygoquadrate.

autoparasite (ô'tôpār'asī) *n.* [Gk. *autos* self *parasitos* one who subsists on another] A parasite growing on another parasite.

autoparthenogenesis (ô'tôpār'thēnôjēn'êsis) *n.* [Gk. *autos* self *parthenos* virgin *genesis* descent.] Development from unfertilized eggs activated by chemical or physical stimulus.

utophagous (ô'tôf'agūs) *a.* [Gk. *autos* self *phagō* to eat.] *Appl.* birds capable of running about and securing food for themselves when newly hatched

aut philous (ô'tôf'îlīs) *a.* [Gk. *autos* self *philein* to love.] Self pollinating autogamous.

autophya (ô'tôf'îā) *n.* *ph.* [Gk. *autos* self *phyein* to produce.] Elements in formation of shell secreted by animal itself of cnophya.

- autophyllogey** (ô'ôfîlôj'ên) *n.* [Gk. *autos* self *phyllon* leaf *genesis* birth.] Growth of one leaf upon or out of another.
- autophyte** (ô'ôfî) *n.* [Gk. *autos* self *phyton* plant.] A self-nourished plant; plant nourished directly by inorganic matter of saprophyte.
- autophytic** (ô'ôfî'ik) *a.* [Gk. *autos* self *phyton* plant.] Autotrophic *q.v.* *See* autophytes.
- autoplasma** (ô'ôplâz'mâ) *n.* [Gk. *autos* self; *plasma* mould.] Plasma from same animal used as medium for tissue culture of homoplasma heteroplasma.
- autoplast** (ô'ôplâst'ik) *n.* [Gk. *autos* self *plastis* formed.] *Appl.* graft to another position in the same individual.
- autopodium** (ô'ôpô'dî'um) *n.* [Gk. *autos* self; *pous* foot.] The hand or foot.
- autopolyploid** (ô'ôpôlî'ploid) *n.* [Gk. *autos* self *polys* many; *eidos* onefold *eidos* form.] An organism having more than two sets of homologous chromosomes.
- autopotamal** (ô'ôpôtâm'ik) *a.* [Gk. *autos* self *potamos* river.] Thriving in a stream not in its back waters *appl.* potamoplankton.
- autoradiography** (ô'ôrâdîôg'râfî) *n.* [Gk. *autos* self *L. radius* ray Gk. *graphein* to write.] Method of demonstrating the presence of specific chemical substances by first making them radioactive then recording on photographic film their distribution in the body organs or tissues.
- autokeleton** (ô'ôkelô'n) *n.* [Gk. *autos* self *skeleros* dried.] A true skeleton formed within the animal.
- autosome** (ô'ôsô'm) *n.* [Gk. *autos* self *soma* body.] A typical chromosome, or euchromosome *opp.* sex-chromosome of allosome.
- autospore** (ô'ôspô'r) *n.* [Gk. *autos* self *spora* seed.] A aplanospore which resembles the parent cell.
- autostoses** (ô'ôstô'sîz) *n. pl.* [Gk. *autos* self *stemon* bone.] Bones formed in cartilage of autostoses.
- utostyle** (ô'ôstil'ik) [Gk. *autos* self *style* pillar.] With mandibular arch self-supporting articulating directly with skull of hyostyle.
- autosynapsis** (ô'ôsînâp'sîs) *n.* [Gk. *autos* self *synapsis* union.] Autosynapsis.
- autosyndesis** (ô'ôsîn dêsîs) *n.* [Gk. *auto* self *syndesis* a binding together.] Pairing of chromosomes from the same parent, in a polyploid or allopolyploid; pairing of homogenetic chromosomes of allorsyndesis.
- autotilly** (ô'ôtîl'î) *n.* [Gk. *autos* self *tillasthai* to pluck.] Autotomy as in certain spiders.
- autotomy** (ô'ôtô'mî) *n.* [Gk. *autos* self *temno* cutting.] Self-amputation of part, as in certain worms, arthropods, and lizards.
- autotransplantation** — transplantation of tissue or organ to another part of same organism of homo-transplantation.
- autotroph** (ô'ôtrôf'ik) *a.* [Gk. *autos* self *trophos* to nourish.] Procuring food independently *appl.* plants which form carbohydrates and proteins from carbon dioxide and inorganic compounds; neither saprophytic nor parasitic *utophytic. Opp.* heterotrophic.
- autotropism** (ô'ôtrôpîz'm) *n.* [Gk. *auto* self; *trope* turn.] Tendency to grow in a straight line *appl.* plants unaffected by external influence tendency of organs to resume original form after bending or straightening due to external factors rectipetality.
- utoxenos** (ô'ôxên'ô'sîs) *n.* [Gk. *autos* self *xenos* host.] Parasitic on the same host at different stages in life history antoclonous.
- utozooid** (ô'ôzô'id) *n.* [Gk. *autos* self *zoon* animal *eidos* form.] An independent alcyonarian zooid or individual.



**auxenolonic acid** —a in B *q.v.*  
**auxentri lic acid**,—auxin A *q.v.*  
**auxesis** (òksè'sis) *n* [Gk. *auxesis* growth.] Growth increase in size owing to increase in cell size induction of cell division of merists.

**auxetic** (òksè'tik) *n*. [Gk. *auxein* to increase.] Any agent which induces cell-division. *a.* Stimulating cell proliferation.

**auxilia** (ògril'ia) *n* *plu* [L. *auxilium* assistance] Tw small sclerites between gultactor and claws, in insects.

**auxiliary cells**,—two or more cells adjoining guard cells or surrounding stomata accessory or subsidiary cells.

**auximone** (òksimòn) *n*. [Gk. *auxis* promoting growth.] An accessory growth-stimulating factor in food of plants.

**auxins** (òksins) *n*. *plu*. [Gk. *auxis* to increase.] Growth-regulating hormones of plants auxin A isolated from growing tips of oat seedlings and human urine  $C_{15}H_{20}O$  auxin B, from vegetable sources and rice, accelerates mycelium growth,  $C_{15}H_{20}O$  hetero-auxin (*q.v.*) and number of other substances.

**auxocyt** (òksò'sit) *n* [Gk. *auxein* to increase *kytes* hollow] Androcyte porocyte oocyte, or spermatocyte at growth period.

**auxospireme** (òksòsp'rém) *n*. [Gk. *auxis* to increase *spirema*, coil.] Spireme formed after syndesial.

**auxospor** (òksòspò) *n* [Gk. *auxis* to increase *sporos* seed.] Zygote of diatoms, formed by union of tw individuals at limit of decrease in size.

**auxotonic** (òksòtòn'ik) [Gk. *auxis* to increase *tonos* strain.] Induced by growth *appl* movements of immature plant *f* allsotonic *appl* contraction against an increasing resistance

**avicularium** (àvikulà'rium) *n*. [L. *avicula* dim of *avis* bird.] I Polyzoa a modified oecium with

muscular movable attachments resembling a bird's beak.

**avifauna** (àvifò'na) *n* [L. *avis* bird *Fauna* rural derty] All the bird species = birds of a region or period ornla.

**avitaminosis** (àv'tàminò'sis) *n*. [L. *a* from *avis*, life *avitaminosum* resinous gum.] A condition or disease resulting from vitamin-deficiency

**awn** (ò) *n* [Icel. *agn* chaff.] The beard of grasses point of leaf in certain Lycopseida.

**axial** (àk'siál) *a*. [L. *axis* axle] *Peri.* axis or stem.

**axial filam nt**,—central filament, as of a stiff radiating pseudopodium or of a flagellum.

**axial sinus**,—a nearly vertical canal in echinoderms, opening into internal division of oral ring sinus, and communicating with stone canal.

**axial skeleton**,—skeleton of head and trunk *opp* appendicula skeleton

**axiat pattern**,—arrangement of parts with reference t a definite axis.

**axil** (àk'sil) *n*. [L. *axilla* arm-pit.] The angle between leaf or branch and axis from which it springs.

**axil** (àk'sil) *a*. [L. *axis* xle.] *Peri* situated in, or belonging to the axis *appl* placement, free central, *q.v.*

**axil mma** (àk'silém'a) *n* [L. *axis* axle Gk. *lemma*, husk.] I medullated nerve fibres, the sheath surrounding axial cylinder

**axilla** (àk'sil'ia) *n*. [L. *axilla* arm-pit.] The arm-pit an axil.

**axillary** (àk'sil'ari) *a*. [L. *axilla* arm-pit] *Peri* axil grow ng in axil as buds *peri* arm pit *appl* seventh longitudinal or anal vein of insect wing *n* One of the pteralia, *q.v.*

**axinost**,—axonost, *q.v.*

**axipetal** (àk'sip'è'tál) *a*. [L. *axis* axle *petere* to seek] Passing towards attachment of axon *ppl* nerve impulses.

- axil** (ák'sis) *n* [L. *axil* axle] The main stem or central cylinder the fundamentally central line of a structure rachis of trilobites pteroporus, *q.v.* structure at base of insect wing
- axis cylinder**—the central tract of a nerve fibre, the impulse transmitter axon and its myelin sheath.
- axodendritic** (ák'sódéndrit'ík) *a*. [Gk. *axos*, axle *dendron* tree.] *Appl.* synapse in which end-brush of axon is in contact with dendritic processes.
- axon** (ák'són) *n* [Gk. *axos* axle.] The axis-cylinder process of nerve-cell normally transmitting excitations from its cell body axone, neuraxon, neurite.
- axon hill or hillock**,—cone of origin, *q.v.*
- axosome** (ák'sósm) *n*. [Gk. *axos* axle *soma*, thread.] A thread of strand forming infusorian stalk; an axostyle the axial filament of flagellum axial thread or genome of chromosome.
- axonomast** (ák'sónóm) *n*. [Gk. *axos* axle *nomos* bone.] The basal portion of rods supporting dermatrochids of fin-rays axonost inter spinal.
- axoplast** (ák'sóplást) *n*. [Gk. *axos* axl *plastis* formed.] A filament extending from kinetoplast to end of body in some trypanosomes.
- axopodium** (ák'sópó díum) *n*. [Gk. *axos* axle *pous* foot.] A pseudopodium with axial filament.
- axosomati** (ák'sódémát'ík) *a*. [Gk. *axos*, axle *soma*, body] *Appl.* synapse in which end brush of axon terminates about nerve-cell body
- axospermous** (ák'sóspér mís) *a*. [Gk. *axos* axle *sperma* seed.] With axile placentation.
- axostyle** (ák'sóstí) *n*. [Gk. *axos* axle *stylos* pillar] A slender flexible rod of organic substance forming supporting axle for the body of many flagellata.
- axotic** (ák'sótík) *a*. [Gk. *a*, without *oikos* *peris* life.] Uninhabited without remains of organisms or

of their products *appl.* Pre-Cambrian era rocks.

- axurophil** (ák'súrófil, ázh'úrófil) *a* [F *axur* from Ar *al axurd* lapidaxuli Gk. *philos*, to love.] Staining readily with blue aniline dyes.
- axygobranchiate** (ák'ígóbráńg'kít) *a*. [Gk. *a* without *sygon*, yoke *branchia*, gills.] Having gills or ctenidia not developed on one side.
- axygoid** (ák'ígóid) *a*. [Gk. *a*, without; *sygon* yoke *oides* form.] Not sygid haploid *appl.* parthenogenesis.
- axygomatous** (ák'ígóm'átis) *a*. [Gk. *a*, without *sygonia*, a bar] Without a sygonia or cheek-bone arch.
- axygoma lous** (ák'ígómá'ús, *a*. [Gk. *a* without *sygon* yoke *males* hmb] Having unpaired appendages *appl.* fin of Acramia and Cyclostomata.
- axygous** (ák'ígó) *n* [Gk. *a* without *sygon* yoke.] An unpaired muscle artery vein, process.
- axygospERM** (ák'ígóspérM) *axygospore (ák'ígóspór) *n*. [Gk. *a*, without *sygon* yoke *sperma*, spores seed] A spore developed directly from a gamete without conjugation parthenospore.*
- axygote** (ák'ígó) *n*. [Gk. *a* without *sygon*, yoke.] An organism resulting from haploid parthenogenesis.
- axygous** (ák'ígós) *a*. [Gk. *a* without *sygon* yoke.] Unpaired.

## B

- Baben-Ehrst bodies**,—metachromatic or volutin granules, in bacteria.
- bacca** (bák'a) *n* [L. *bacca* berry] A pulpy fruit; berry
- baccate** (bák'át) *a*. [L. *bacca*, berry] Pulpy fleshy berried.
- bacciferous** (bák'ífér'tis) *a*. [L. *bacca*, berry *ferre*, to bear.] Berry-producing bearing
- bacciform** (bák'síform) *a*. [L. *bacca* berry *forme*, shape.] Berry-shaped.
- bacillary** (bák'árí) *a*. [L. *bacillum* small staff.] *Appl.* layer of rods and cones of retina.



**baroesthesia** (bár'eshē'zā) *n.* [Gk. *baros* weight; *aisthēsis* sensation.] The sensation of pressure.

**barb** (bárb) *n.* [L. *barba* beard.] One of delicate thread-like structures extending obliquely from feather rachis, and forming the vane; a hooked hair-like bristle.

**barbat** (bár'bát) *a.* [L. *barbatus* bearded.] Bearded having hair tufts.

**barbel** (bár'bél) *n.* [L. *L. barbellus* barbel.] A tactile process arising from the head of various fishes.

**barbellat** (bár'bél'át, bár'bél'át) *a.* [L. *barba* beard.] With stiff hooked hair-like bristles; *appl.* pappus.

**barbical** (bár'bés'ál) *n.* [L. *barba* beard.] Small process on a feather barbule.

**barbula** (bár'búla) *n.* [L. *barbula*, *dim.* of *barba* beard.] Row of teeth in peristome of certain mosses.

**barbul** (bár'búl) *n.* [L. *barbula* *dim.* of *barba*, beard.] One of small hooked processes fringing barbs of feather appendage of lower jaw in some teleosts.

**bark** (bárk) *n.* [Dan. *baré*] The tissues external to the vascular cambium, collectively phloem, cortex and periderm outer dead tissues and cork.

**barotaxis** (bár'bák'sis) *n.* [Gk. *baros* weight *taxis* arrangement.] The reaction to pressure stimulus.

**Bartholin duct** [*C. Bartholin* *fr.* Danish anatomist]. The larger duct of the sublingual gland.

**Bartholin glands**,—the greater vestibular glands on each side of vagina, homologues of male bulbourethral glands.

**basal** (bá'sál) *a.* [L. *basis* base.] *Part* at or near the base.

**basal bone**,—*as* basale *basale* *p.p.*

**basal ganglia**,—ganglia connecting cerebrum with other centres.

**basal granule**,—a thickening or body at base of flagellum in certain protozoa.

**basal knobs**,—swellings or granules at points of emergence of cilia in ciliated epithelial cells.

**basal leaf**—one of the leaves produced near base of stem.

**basal metabolic rate**—rat of metabolic heat of resting organism, expressed as percentage of normal heat production per hour per square metre surface area.

**basal metabolism**,—standard metabolism, tissue activity or physico-chemical changes of a resting organism.

**basal placenta**,—arises from proximal end of ovary.

**basal plates**,—certain plates in echinoderms, situated at or near top of stalk in crinoids, in echinoids forming part of apical disc; fused parachordal plates in skull development of placental outer wall of intervillous space.

**basal wall**,—the first plane of division (oospores of ferns and mosses).

**basalar** (bá'sál'ár) *a.* [L. *basis* base *ala*, wing] *Appl.* sclerites below wing base in insects.

**basale** (bá'sál'ē) *n.* [L. *basis* base.] A bone of variable structure arising from fusion of pterygiophores and supporting fish fins *as* basale, the fused basioccipital and parasphegoid in Gymnophiona.

**basem t membrane**,—the membrane of gland containing acini or special secreting portions.

**baseost** (bá'séost) *n.* [Gk. *bas* base *osteon* bone.] Distal element of pterygiophore of teleosts.

**basal alar** (bá'sál'ál'ár) *a.* [L. *basis* base *alar* smaller small *pt.*] Extending from basion to centre of alveolar arch.

**basibranchial** (bá'síbráńg'kiál) *n.* [Gk. *basis* base; *branchia*, gills.] Median ventral or basal skeletal portion of branchial arch.

**basí** (bá'sí) *a.* [Gk. *basis* base.] *Appl.* stains which act in general on nuclear contents of cell of acidic *appl.* number the minimum haploid chromosome number occurring in series of euploid species of genus chromosome number 1 gametes of diploid ancestor of polyploid organism.

- basichromatin** (bā sīkrō mātī) *n.* [Gk. *basis* base; *chroma* colour] The deeply staining substance of nuclear network chromatin.
- basiconic** (bā sīkōn'ik) *a.* [Gk. *basis* base; *konos* cone.] Having or consisting of a conical process above general surface *appl.* acmillae.
- basicoxite** (bā sīkōks'it) *n.* [L. *basis* base; *axis* hip.] Basal ring of coxa.
- basicranial** (bā sīkrā nīāl) *a.* [Gk. *basis* base; *kraniōn* skull.] Situated at or relating to base of skull.
- basidia** *pl.* f. basidium.
- basidia** (bā sīd'īāl) *a.* [Gk. *basis* base; *idion* dim] *Part* basidia or a basidium.
- basidiocarp** (bā sīd'īōkarp) *n.* [Gk. *basis* base; *idion* dim; *karpos* fruit.] The fruit-body of Basidiomycetes.
- basidiophore** (bā sīd'īōfō) *n.* [Gk. *basis* base; *idion* dim; *phoros* to bear] A sporophore which carries basidia.
- basidiospor** (bā sīd'īōspōr) *n.* [Gk. *basis* base; *idion* dim; *spora* seed.] A spore or gonidium basitected from a basidium secondary conidium a basidio-gonidium.
- basidium** (bā sīd'īūm) *n.* [Gk. *basis* base; *idion* dim] A special cell row of cells, of certain fungi, of ring spores by basitraction.
- basidorsal** (bā sīdōr'sāl) *a.* [L. *basis* base; *dorsum* back.] *Appl.* small cartilaginous neural plate.
- basifixed** (bā sīfīksd) *a.* [L. *basis* base; *figere* to make fast.] Attached by base innate, having filament attached to another base.
- basifugal** (bā sīf'ūgāl) *a.* [L. *basis* base; *fugere* to flee.] Growing away from base.
- basifuge** (bā sīf'ū) *n.* [L. *basis* base; *fugere* to flee.] A plant unable to tolerate basic soils calcifuge. *a.* Oryphilous.
- basigamous** (bā sīg'āmōs) *a.* [Gk. *basis* base; *gamos* marriage.]

Having oosphere reversed in embryo-sac.

**basigynium**,—podogynium *q.v.*

**basihyal** (bā sīh'īāl) *n.* [Gk. *basis* base; *hyoides* Y-shaped.] Broad median plate, the basal or median ventral portion of hyoid arch.

**basiliabium** (bā sīl'ībīūm) *n.* [L. *basis* base; *labium* lip] Sclerite formed by fusion of labiostipites in insects.

**basilar** (bā sīl'ār) *a.* [L. *basis* base.] *Part* near or growing from base; as artery crest membrane plexus, plate, process, style.

**basille** (bā sīl'ik) *a.* [Gk. *basilleas* royal.] *Appl.* a large vein on inner side of biceps of arm.

**basilingual** (bā sīlīng'gwāl) *a.* [L. *basis* base; *lingua* tongue.] *Appl.* a broad cartilaginous plate the body of the hyoid in crocodiles, turtles, and amphibians.

**basimandibula** (bā sīmāndīb'īlā) *n.* [L. *basis* base; *mandibula* lower jaw] A small sclerite, on insect head, at base of mandible.

**basimaxilla** (bā sīmāksīl'īlā) *n.* [L. *basis* base; *maxilla*, upper jaw] A sclerite at base of maxilla in insects.

**basioccipital** (bā sīōksīp'ītāl) *n.* [L. *basis* base; *scriptus* back of head.] The median basilar bone or element in occipital region of skull.

**basion** (bā sīōn) *n.* [Gk. *basis* base.] The middle of anterior margin of foramen magnum.

**basiophthalmite** (bā sīōfthāl'mīt) *n.* [Gk. *basis* base; *ophthalmos* eye.] The proximal joint of eye-stalk in crustaceans.

**basiotic** (bā sīōt'ik) *a.* [Gk. *basis* base; *otic* ear] Mesotic *q.v.*

**basipetal** (bā sīp'ētāl) *a.* [L. *basis* base; *petere* to seek.] Developing from apex to base; *appl.* leaves and inflorescences.

**basipharynx** (bā sīl'ār'ingks) *n.* [Gk. *basis* base; *pharynx* gullet.] In insects, epipharynx and hypopharynx united.

**basiphil** (bā sīf'īl) *a.* [Gk. *basis* base; *philein* to love.] Basophil, *q.v.* *n.* A basiphil cell; a mast cell *q.v.*

**basipodite** (bā'sip'ōdīt) *n.* [Gk. *basis* base *podis* foot.] The second or distal joint of the protopodite of certain limbs of Crustacea trochanter of spiders.

**basipodium** (bā'sip'ōdīm) *n.* [Gk. *basis* base *podis* foot.] Wrist or ankle.

**basiproboecia** (bā'sip'rōbōē'ia) *n.* [Gk. *basis* base *proboscis* trunk.] Membranous portion of proboscis of some insects, consisting of mentum, submentum and maxillary cardines and stipites.

**basipterygium** (bā'stēr'iġ'ium) *n.* [Gk. *basis* base *pterygion*, little wing.] A large flat triangular bone in pelvic fin of teleosts and bone or cartilage in other fishes.

**basipterygoid** (bā'stēr'ig'oid) *n.* [Gk. *basis* base *pterys* wing *eidos* form.] A process of the basipterygoid in some birds.

**basiscopi** (bā'stēr'p'ik) *n.* [Gk. *basis* base *scopia* to view.] Facing towards the base *opp* acroscopic.

**basisphenoid** (bā'stēr'fē'noid) *n.* [Gk. *basis* base *sphen*, wedge; *eidos* form.] Cranial bone between basioccipital and presphenoid.

**basisternum** (bā'stēr'nūm) *n.* [L. *basis* base *sternum* breast bone.] The principal sclerite of insect sternum antesternite, costosternum.

**basistyle** (bā'stīl) *n.* [Gk. *basis* base *stylos* pillar.] Proximal part or coxite of gonostyle in mosquitoes *Cf* dististyle.

**basitarsus** (bā'stār'stā) *n.* [Gk. *basis* base *tarsus* sole of foot.] Proximal tarsomere or metatarsus of spiders. *Cf* telotarsus.

**basitemporal** (bā'stēm'pōrāl) *n.* [L. *basis* base *tempus*, temple.] A broad membrane bone covering basiphenoidal region of skull.

**basitonic** (bā'stōn'ik) *n.* [Gk. *basis* base *tonos* bract.] H vane anther united at its base with rostellum basitonicus. *Opp* acrotonic.

**basivertebral** (bā'stēr'tēbrāl) *n.* [L. *basis* base; *vertebra*, vertebra.] *Appl.* veins within bodies of verte-

brae and communicating with vertebral plexuses.

**basket cells**,—myo-epithelial cells surrounding glandula cells cerebellar cortical cells with axon branches surrounding Purkinje cells.

**basophil** (bā'sōfil) *n.* [Gk. *basis* base *philos* to love.] Having strong affinity for basic stains also basiphil basiphilic, basophile basophilic, basophilous. *n.* A cell which stains with basic dyes.

**bast** (bāst) *n.* [A.S. *bast*, bast.] The inner fibrous bark of certain trees *liber*

**bastard merogony**,—activation of an enucleated egg fragment by spermatozoon of a different species.

**bastard wing**,—the alula or alaporta, consisting of three quill feathers borne on first digit of bird wing

**bathylimnetic** (bāth'ilimnēt'ik) *n.* [Gk. *bathy* deep *limnos* living in marshes.] Living or growing in the depths of lakes or marshes.

**bathymetric** (bāth'imēt'rik) *n.* [Gk. *bathy* deep *metron*, measure.] *Peri.* vertical distribution of organisms in pace.

**bathypelagi** (bāth'pēlāj'ik) *n.* [Gk. *bathy* deep *pelagos* sea.] *Peri* or inhabiting the deep sea.

**bathysmal** (bāthīr'māl) *n.* [Gk. *bathy* deep.] *Peri.* deepest depths of the sea.

**batonett** (bāttōnēt) *n.* [F. *bâtonnet* small stick.] An element of the Golgi apparatus *q v*

**batrachian** (bātrāk'ian) *n.* [Gk. *batrachos* frog.] Relating to frogs and toads.

**B-cells**,—beta cells of islets of Langerhans.

**B chromosome**, — supernumerary chromosomes in males.

**B-complex**,—a group of accessory food factors comprising thiamine or vitamin B<sub>1</sub>, riboflavin (B<sub>2</sub>), pantothenic acid (B<sub>3</sub>), niacin or P P factor pyridoxin (B<sub>6</sub>), biotin (H), inositol, choline, para-amino benzoic acid, and folic acid (B<sub>7</sub>) and B<sub>12</sub> anti-pernicious-anemia factor

**bdelloid** (dē'old) *a.* [Gk. *bdella* leech *eides* form.] Having the appearance of a leech.

**beard** (bērd) *n.* [A. S. *beard* beard.] Any of the arrangements of hairs which resemble a man's beard, on heads of animals barbed or bristly hair-like outgrowths on grain awn.

**bedeguar** (bēd'ē-gār) *n.* [From Persian through F. *bedeguar* thistle.] A mossy gall formed on rose-bushes.

**behaviorism** (bēhā vīōrīzm) *n.* [A. S. *behaldan* to hold in.] Theory that the manner in which animals act may be explained in terms of conditioned neuromotor and glandular reactions.

**belemnoid** (bēl'ēmōid bēlēm nōid) *a.* [Gk. *belemnos* dart *eides* form.] Shaped like a dart *appl.* styloid process.

**Bellini's ducts** [*L. Bellini* Italian anatomist]. Tubes opening at apex of kidney papilla and formed by union of smaller straight or collecting tubules.

**bell nucleus**,—a solid mass of cells, derived from ectoderm and lying between ordinary ectoderm and mesogloea at apex of medusoid bud.

**belonoid** (bēl'ōoid) *a.* [Gk. *belone* needle *eides* form.] Shaped like a needle styloid.

**benthic** (bēn'thik) *a.* [Gk. *benthos* depths of sea.] *Part.* a living on, sea bottom *benthal*.

**benth potamons** (bēn thōpōt āmōs) *a.* [Gk. *benthos* depths *potamos* river] *Part.* growing or living on bed of a river or stream.

**benthos** (bēn'thōs) *n.* [Gk. *benthos* depths of sea.] The fauna and flora of the sea-bottom.

**Berlese organ** [*A. Berlese* Italian zoologist]. A glandular organ in haemocoel on right side of female abdomen in *Cimex* secreting during passage of spermatozoon to permatheca.

**berry** (bēr'i) *n.* [A. S. *berie* berry] Inferior indehiscent, many-seeded fruit, usually with fleshy pericarp

egg of lobster or crayfish dark knob-like structure on bill of swan. **beta** (β) cells,—basophil cells in pars glandularis of pituitary gland cells with alcohol-sol ble granules, in islets of Langerhans, B cells.

**beta** (β) granules,—granules in peripheral region of protoplast, a protein reserve in blue-green algae cyanophycin.

**betaine** (bē'tāin) *n.* [*L. beta*, beet.] A basic decomposition product of lecithin, occurring in beet and other plants and in animals  $C_5H_{11}O_2N$

**Betz cells** [*V. A. Betz* Russian histologist]. Giant pyramidal cells in motor area of cerebral cortex.

**B horizon**,—the lower illuvial soil layers.

**biscuminate** (bīskū mīnāt) *a.* [*L. bis* twice *acumen* point.] Having two tapering points.

**biarticulate** (bī'ārtik'ulāt) *a.* [*L. bis* twice *articulus* joint.] Two-jointed.

**bicaeular** (bīkēp'ulār) *a.* [*L. bis* twice *capsula* little box.] Having two capsules or vesicles.

**bicarinate** (bīkār'īnāt) *a.* [*L. bis* twice *carina* keel.] With two keel-like processes.

**bicarpellat** (bīkār'p'elāt) *a.* [*L. bis* twice Gk. *karpas* fruit.] With two carpels *bicarpellary*

**bicaudate** (bīkō dāt) *a.* [*L. bis* twice *cauda* tail.] Possessing two tail-like processes.

**bicellular** (bīkēl'ulār) *a.* [*L. bis* twice *cellula* little cell.] Composed of two cells

**bicentric** (bī'sētrik) *a.* [*L. bis* twice *centrum* centre.] *Part.* two centres *appl.* distribution of species etc. discontinuous owing to alternation in the intervening area.

**biceps** (bī'sēps) *n.* [*L. bis* twice; *caput* head.] A muscle with two heads or origins, as *biceps brachii* and *femoris*.

**bicillate** (bīkīl'it) *a.* [*L. bis* twice *cilium* eyelash.] Fringed with two cilia.

**bicipital** (bĭp'itāl) *a.* [*L. bis* twice *caput* head.] *Peri* biceps *appl.* fascia, lacertus fibrosus, an aponeurosis of distal tendon of the biceps brachii; a groove, the intertubercular sulcus, on upper part of humerus ridges, the crests of the greater and lesser tubercles of the humerus *appl.* rib with dorsal tuberculum and ventral capitulum.

**bicollateral** (bĭkōlāt'ērāl) *a.* [*L. bis* twice *com* together *latus* side.] Having the two sides similar *appl.* vascular bundles with phloem on both sides of xylem, as in Cucurbitaceae and Solanaceae.

**bicolligate** (bĭkōl'igāt) *a.* [*L. bis* twice *com* together; *ligare* to bind.] With two stretches of webbing on the foot.

**biconjugat** (bĭkōn'jōgāt) *a.* [*L. bis* twice *com* with *yugum* yoke.] With two similar sets of pairs.

**bicornate** (bĭkōrnat) *a.* [*L. bis* twice *cornutus* horned.] With two horn-like processes.

**bicostat** (bĭkōstāt) *a.* [*L. bis* twice, *costa*, rib.] Having two longitudinal ridges or ribs, as leaf.

**bicrenat** (bĭkrēnāt) *a.* [*L. bis* twice *crena*, notch.] Doubly crenate, as crenate leaves with notched toothed margins.

**bicuspid** (bĭkŭs'pid) *a.* [*L. bis* twice *cuspis* point.] Having two cusps or points *appl.* valve consisting of anterior and posterior cusps attached to circumference of left atrioventricular orifice, mitral valve *appl.* teeth, premolar.

**bicyclic** (bĭk'lik) *a.* [*L. bis* twice *Gk. kyklos* circle.] Arranged in two whorls.

**Bladder' ganglia** [*F H Bladder* Estomac anatomist]. A collection of nerve-cells in region of the auriculo-ventricular groove.

**Bladder' organ**,—a rudimentary ovary attached to anterior end of generative organs in the toad.

**bid ūtal** (bĭd'ŭtāl) *a.* [*L. bis* twice *dens*, tooth.] Having two teeth, or tooth-like processes; bidentate.

**bidenticulate** (bĭ'dēntik'ŭlāt) *a.* [*L. bis* twice *dens* of *dens* tooth.] With two small teeth or tooth-like processes, as some scales.

**biennial** (bĭēn'ŭl) *a.* [*L. bis* twice; *annus* year] Lasting for two years.

**bifacial** (bĭfā'siāl, bĭfā'shāl) *a.* [*L. bis* twice; *facies* face.] *Appl.* leaves with distinct upper and lower surfaces; dorsiventral.

**bifarious** (bĭfā'riŭs) *a.* [*L. bis* twice *foris* in rows.] Arranged in two rows, one on each side of axis.

**bifid** (bĭf'īd) *a.* [*L. bis* twice *findere* to split.] Forked opening with median cleft divided nearly to middle line.

**biflabellat** (bĭf'labēl'āt) *a.* [*L. bis* twice *labellum* fan.] Doubly flabellate, each side of antennal joints sending out flabellate processes.

**biflagellat** (bĭfā'liāt) *a.* [*L. bis* twice *flagellum* whip] Having two flagella.

**biflex** (bĭfēks) *a.* [*L. bis* twice *flexere* to bend.] Twice curved.

**biflorate** (bĭfōr'āt) *a.* [*L. bis* twice *flor* flower] Bearing two flowers.

**bifoliar** (bĭfōl'iar) *a.* [*L. bis* twice *folium* leaf] Having two leaves.

**biflate** (bĭfōlāt) *a.* [*L. bis* twice *folium* leaf.] *Appl.* palmate compound leaf with two leaflets.

**biforin** (bĭfōr'in) *a.* [*L. bis* twice *foris* door] An oblong raphidian cell opening at each end.

**bifor us** (bĭfōr'ŭs) *a.* [*L. bis* twice *foris* door] With two openings *appl.* spiracles in larvae of certain beetles.

**bifurcate** (bĭfūr'kāt) *a.* [*L. bis* twice *furca* fork.] Forked; having two prongs having two joints, the distal V-shaped and attached by its middle to the proximal.

**bigeminal** (bĭ'gem'īnāl) *a.* [*L. bis* twice *geminus* double.] With structures arranged in double pairs *appl.* arrangement of pore-pairs in two rows in ambulacra of some schinoids of corpora bigemina.



**bigeminate** (bĭjĕm'ĭnĕt) *a.* [*L. bis* twice *geminus* double] Doubly paired twin-forked.

**bigeneric** (bĭjĕnĕ'ĭk) *a.* [*L. bis* twice *genus* race.] *Appl* hybrids between two distinct genera.

**bijugate** (bĭjoo gāt) *a.* [*L. bis* twice *jugare* to join.] With two pairs of leaflets.

**bilabiate** (bĭlĭ'bĭĕt) *a.* [*L. bis* twice *labium* lip.] Two-lipped *appl* calyx corolla, dehiscence.

**bilamellar** (bĭlāmĕl'ār) *a.* [*L. bis* twice *lamella*, plate.] Formed of two plates having two lamellae.

**bilaminar** (bĭlām'ĭnār) *a.* [*L. bis* twice *lamina*, thin plate.] Having two plate-like layers diploblastic.

**bilatral** (bĭlāt'rāl) *a.* [*L. bis* twice *latus* side.] Having two sides symmetrical about an axis.

**bile** (bĭl) *n.* [*L. bilis* bile.] The secretion of the liver passing to duodenum and assisting digestion.

**biliary** (bĭl'ĭār) *a.* [*L. bilis* bile.] Conveying or *part* bile.

**bilicyanin** (bĭl'ĭsĭn) *n.* [*L. bilis* bile *Gk. kyaneos* dark blue] A blue pigment resulting from oxidation of biliverdin.

**bilipurpurin** (bĭl'pūr'pūrĭn) *n.* [*L. bilis* bile *purpurea*, purple.] Phylloerythrin.

**bilirubin** (bĭl'ĭroo'bĭn) *n.* [*L. bilis* bile *ruber* red] A reddish-yellow pigment of bile and blood, end-product of haemoglobin metabolism as also biliflavine biliphaein,  $C_{43}H_{56}N_4O_6$ .

**biliverdin** (bĭl'ĭvĕr'dĭn) *n.* [*L. bilis* bile *F* *vert* green.] A green bile pigment formed by oxidation of bilirubin ( $C_{43}H_{56}N_4O_6$ ).

**bilobate** (bĭlō'bĭt) *a.* [*L. bis* twice *L. lobus* from *Gk. lobos* rounded flap.] Having two lobes.

**bilobular** (bĭlōb'ulār) *a.* [*L. bis* twice *L. lobulus* dim. of *lobus* lobe.] Having two lobules.

**bilocellate** (bĭlōĕl'ĭt) *a.* [*L. bis* twice; *locellus* dim. of *locus* place.] Divided into two compartments.

**bilocular** (bĭlōĕk'ulār) **biloculine** (bĭlōĕk'ulĭn) *a.* [*L. bis* twice *locus* place.] Containing two cavities or chambers of *loculus*.

**bilophodont** (bĭlōf'ōdĕnt) *a.* [*L. bis* twice *Gk. lophos* ridge *odous* tooth.] *Appl* molar teeth of tapir which have ridges joining the two anterior and two posterior cusps.

**bimaculate** (bĭmāk'ulāt) *a.* [*L. bis* twice *macula*, spot.] Marked with two spots or stains.

**bimanous** (bĭm'anūs) *a.* [*L. bis* twice *manus* hand.] Having two hands *appl* certain Primates.

**bimastism** (bĭmās'tĭzm) *n.* [*L. bis* twice *Gk. mastos* breast.] Condition of having two mammae.

**bimuscular** (bĭmōs'kulār) *a.* [*L. bis* twice *musculus* muscle.] Having two muscles.

**binary fission**,—division of a cell into two by an apparently simple division of nucleus and cytoplasm.

**binary nomenclature** — binomial nomenclature, *q.v.*

**binat** (bĭ'nāt) *a.* [*L. binis* two by two] Growing in pairs *appl* leaf composed of two leaflets.

**binocular** (bĭnōĕk'ulār) *a.* [*L. binis* pair *oculus* eye.] Having or *part* two eyes stereoscopic, *appl* vision.

**binodal** (bĭnō dāl) *a.* [*L. bis* twice *nodus* knob] Having two nodes, as stem of plant.

**binomial** (bĭnō mĭāl) *a.* [*L. bis* twice *nomen* name.] Consisting of two names *appl* nomenclature the system of double names given to plants and animals—first generic name, then specific, as *Felis* (genus) *tigris* (species).

**binomialism** (bĭnō mĭālĭzm) *n.* [*L. bis* twice *nomen* name.] The system of binomial nomenclature.

**binovular** (bĭnōv'ulār) *a.* [*L. binis* pair *ovum* egg] *Part* two ova dizygotic *appl* twinning.

**binuclear** (bĭnō'kulār) *a.* [*L. bis* twice *nucleus* small ut.] Having two nuclei.

- bi blast (bī'blāst) *n.* [Gk. *bios* life] *Alaster* bod.] A hypothetical unit, *q.v.*
- biocatalyst (bī'okāt'alist) *n.* [Gk. *bios* life *katalysis* dissolving] An enzyme, a ferment.
- biocellate (bī'okē'lit) *n.* [L. *bis* twice *oculus* dim. of *oculus* eye.] Having two ocelli.
- biocoenosis,—biocoenosis, *q.v.*
- biochemistry (bī'okēm'istrī) *n.* [Gk. *bios* life *chemia* transmutation.] The chemistry of living organisms.
- bioclone (bī'ōklōn) *n.* [Gk. *bios* life *choris* separate.] Boundary of a floral or faunal region climatic boundary of a floral region a group of similar biotopes.
- biochrome (bī'ōkrōm) *n.* [Gk. *bios* life *chroma* colour] Any natural colouring matter of plants and animals biological pigment.
- biocoenosis (bī'okōnō'sis) *n.* [Gk. *bios* life *koenōs* common.] A community of organisms inhabiting a biotope biocoenosis.
- biocycle (bī'ōsikl) *n.* [Gk. *bios* life *kyklos* place of assembly] One of the three main divisions of the biosphere marine or fresh-water or terrestrial habitat.
- biogeography (bī'ōjē'ōgrāfī) *n.* [Gk. *bios* life *geō* earth *graphein* to write.] Science dealing with the integration of ecology and genetics of populations.
- biodynamics (bī'ōdinā'mīka) *n.* [Gk. *bios* life *dynamis* power] The science of the active vital phenomena of organisms.
- bioecology (bī'ōkōl'ōjī) *n.* [Gk. *bios* life *oikos* household *logos* discourse.] Ecology of plants and animals.
- bioelectric (bī'ōēlēk'trīk) *n.* [Gk. *bios* life *elektron* amber] *Appl.* currents produced in living organisms.
- bioenergetics (bī'ōēnē'rjē'tīka) *n.* [Gk. *bios* life *energeia* action.] Study of energy transformations in living organisms.
- biogen (bī'ōjēn) biogene (bī'ōjēn) *n.* [Gk. *bios* life *genesis* descent.]

- A hypothetical unit, *q.v.* a large living molecule.
- biogenesis (bī'ōjēn'ēsis) *n.* [Gk. *bios* life *genesis* descent.] The theory of the descent of living matter from living matter—*see* *abiogenesis* *vs.* *Opp.* *abiogenesis*.
- biogenetic law — recapitulation theory *q.v.*
- biogenous (bī'ōjēn'ēsis) *n.* [Gk. *bios* life *genesis* offspring] Inhabiting living organisms, as parasites.
- biogeny (bī'ōjēn'ēsis) *n.* [Gk. *bios* life *genesis* descent.] The science of the evolution of organisms, comprising ontogeny and phylogeny.
- biogeochemistry (bī'ōjē'ōgrāfī'kēm'istrī) *n.* [Gk. *bios* life *geō* earth *chemia* transmutation.] The study of the distribution and migration of chemical elements present in living organisms and in interaction with their geographical environment.
- biogeography (bī'ōjē'ōgrāfī) *n.* [Gk. *bios* life *geō* earth *graphein* to write.] The part of biology dealing with the geographical distribution of plants (phytogeography) and animals (zoogeography) chorology.
- biological (bī'ōl'ōjēn'ēsis) *n.* [Gk. *bios* life *logos* discourse.] Relating to the science of life.
- biology (bī'ōl'ōjēn'ēsis) *n.* [Gk. *bios* life *logos* discourse.] The science of life and living.
- bioluminescence (bī'ōlūmīnēs'ēns, -lōn) *n.* [Gk. *bios* life *lū* *luminare* to grow light.] Light production, as in many groups of animals, and in bacteria and fungi.
- biolysis (bī'ōl'ōjēn'ēsis) *n.* [Gk. *bios* life *lysis* loosening] The decomposition of organic matter resulting from activity of living organisms disintegration of life.
- bi mass (bī'ōmās) *n.* [Gk. *bios* life *massa* to equate.] Total weight of organisms per unit area.
- biome (bī'ōmē) *n.* [Gk. *bios* life.] A community of living organisms a complex of climax communities of plants and animals in major region, as tundra, forest, grassland desert.

biometeorology (bī'ōmētēōrōl'ōjī) *n.* [Gk. *bios* life *meteorologia*, treatise on the heavenly bodies.] The study of the effects of atmospheric conditions upon plants and animals.

biometrics (bī'ōmēt rīk) *n.* [Gk. *bios* life *metron* measure.] The statistical study of living organisms and their variations. biometry.

bion (bī'ōn) blont (bī'ōnt) *n.* [Gk. *bion* living.] An independent living organism; an individual organism.

bionergy (bī'ōnērjī) *n.* [Gk. *bios* life *energeia* action.] Vital force.

bionomics (bī'ōnōm'īk) *n.* [Gk. *bios* life *nomos* law.] The study of organisms in relation to their environment. bionomy. ecology.

biophore (bī'ōfō) *n.* [Gk. *bios* life *phoros* to carry.] A hypothetical unit, *q.v.*

bi photogenesis (bī'ōfōtōjēn ēsē) *n.* [Gk. *bios* life *phos* light *genesis* origin.] The production and emission of light by plants or by animals. bioluminescence.

bi physiques (bī'ōfīz īk) *n.* [Gk. *bios* life *physis* nature.] Study of biological phenomena interpreted in terms of physical principles. physics as applicable to biology.

biophyte (bī'ōfīt) *n.* [Gk. *bios* life *phytos*, plant.] A plant which gets sustenance from living organisms.

bi plasm (bī'ōplāz) *n.* [Gk. *bios* life *plasma*, mould.] Living matter. protoplasm.

bi plast (bī'ōplāst) *n.* [Gk. *bios* life *plastos* (mold).] A minute quantity of living protoplasm capable of reproducing itself.

biopsy (bī'ōpsī) *n.* [Gk. *bios* life *opsis* sight.] Examination of living organisms, organs, or tissues.

biorgan (bī'ōrgān) *n.* [Gk. *bios* life *organon* instrument.] An organ in the physiological sense not necessarily morphological unit.

bios (bī'ōs) *n.* [Gk. *bios* life.] Organic life, plant or animal. complex mixture of vitamins or growth factors. B complex, *q.v.*

bioseri (bī'ōsērīēs) *n.* [Gk. *bios* life *L. seris* row.] A succession

of changes of any single heritable character.

biosomes (bī'ōsōm) *n. pl.* [Gk. *bios* life *soma* body.] Structural and functional units in cytoplasm, as chondriosomes, chromidia and plastidia.

biosphere (bī'ōsfēr) *n.* [Gk. *bios* life *sphaiera*, globe.] The part of the globe containing living organisms.

biostatics (bī'ōstāt'īk) *n.* [Gk. *bios* life *statos* stationary.] The science of structure in relation to function of organisms.

biosystematics,—genonomy · taxonomy.

biota (bī'ōtā) *n.* [Gk. *bios* life.] The fauna and flora of a region.

biotic (bī'ōtīk) *n.* [Gk. *biotikos* part life.] Part life. vital.

biotic community—a community of plants and animals as a whole.

biotic potential—highest possible rate of population increase resulting from maximum natality and minimum mortality.

biotin (bī'ōtīn) *n.* [Gk. *bios* life.] Vitamin H. growth substance of yeast, also obtained from liver or coenzyme R required by nitrogen-fixing bacteria. antiperoxidase factor. antiraviden.  $C_{12}H_{10}O_2N_2S$ .

bioton (bī'ōtōndē) *n.* [Gk. *bios* life *tonos* tension.] The ratio between assimilation and dissimilation of biogens.

biotope (bī'ōtōp) *n.* [Gk. *bios* life; *topos* place.] An area in which the main environmental conditions and biotypes adapted to them are uniform. a place where organisms can survive also microhabitat.

biotype (bī'ōtīp) *n.* [Gk. *bios* life *L. typos* image.] Type of plant or animal. all the individuals of equal genotype.

biovulate (bī'ōv'ūlāt) *n.* [*L. bios* twice *ovum*, egg.] Containing two ova.

bipaleolate (bīpālēōlāt) *n.* [*L. bis* twice *palma* chaff.] Furnished with two small palmæ.

bipalmat (bīpāl'māt) *n.* [*L. bis* twice *palma*, palm of hand.] Lobed with the lobes palm-lobed.

- biparietal (bɪˈpɑːri.ətəl) *n.* [L. *bis* twice *paries* wall.] Connected with the two parietal eminences.
- biparous (bɪˈpɑːr.əs) *n.* [L. *bis* twice; *parere* in bear.] Having two young at a time dichotomous, *appl.* branching
- bipectinate (bɪˈpekt.ɪ.nət) *n.* [L. *bis* twice; *pecten* comb.] Having the two margins furnished with teeth like a comb.
- biped (bɪˈped) *n.* [L. *bis* twice *pes* foot.] A two-footed animal.
- bipenniform (bɪˈpen.ɪˈfɔːm) *n.* [L. *bis* twice *penna*, feather *forma* shape.] Feather-shaped with sides of vane of equal size *appl.* some monocles.
- bipetalous (bɪˈpet.əl.əs) *n.* [L. *bis* twice Gk. *petalon* leaf.] With two petals.
- bipinnaria (bɪˈpɪn.ər.ɪ.ə) *n.* [L. *bis* twice *penna*, feather] An asteroid larva with two bands of cilia.
- bipinnate (bɪˈpɪn.ət) *n.* [L. *bis* twice *penna* feather] Having leaflets growing in pairs on paired stems.
- bipinnatifid (bɪˈpɪn.ətɪˈfɪd) *n.* [L. *bis* twice *penna*, feather *fendere* to cleave.] With leaves segmented and these segments again divided.
- bipinnatifid (bɪˈpɪn.ətɪˈfɪd) *n.* [L. *bis* twice *penna* feather *partiri* to divide.] Bipinnatifid, but with divisions extending nearly to midrib.
- bipinnatifid (bɪˈpɪn.ətɪˈfɪd) *n.* [L. *bis* twice *penna*, feather *secare* to cut.] Bipinnatifid, but with divisions extending to midrib.
- biplicate (bɪˈplɪk.ət) *n.* [L. *bis* twice *plicare* to fold.] Having two folds.
- bipocillus (bɪˈpɒs.ɪ.l.əs) *n.* [L. *bis* twice *poculus*, little cup.] A microscopical with curved shaft and cup-shaped expansion at each end.
- bipolar (bɪˈpɒl.ər) *n.* [L. *bis* twice *polus* pole.] Having, located at, or *peri.* two ends or poles *appl.* nerve cells having processes at each end *appl.* *Illini* species

occurring toward Arctic and Arctic regions.

bipolarity (bɪˈpɒl.ər.ɪ.ti) *n.* [L. *bis* twice *polus* pole] The condition of having two polar processes condition of having two distinct poles, as vegetative and animal poles in an egg

biradial (bɪˈræd.ɪ.əl) *n.* [L. *bis* twice *radius* ray] Symmetrical both radially and bilaterally as some coelenterates disymmetrical

biramous (bɪˈræm.əs) *n.* [L. *bis* twice *ramus* branch.] Divided into two branches.

birostrate (bɪˈrɒs.treɪt) *n.* [L. *bis* twice *rostrum* beak.] Furnished with two beak-like processes.

birth pore,--uterine pore of trematodes and cestodes birth-opening of redia of trematodes.

biseptate (bɪˈsep.tət) *n.* [L. *bis* twice *septum* fence.] With two partitions.

biserial (bɪˈsɪr.ɪ.əl) *n.* [L. *bis* twice *series* row] Arranged in two rows or series; biserial.

biserrate (bɪˈsɛr.ət) *n.* [L. *bis* twice, *serra* saw] Having marginal teeth which are themselves notched.

bisexual (bɪˈseks.ʊ.əl) *n.* [L. *bis* twice, *sexus* sex.] Having both male and female reproductive organs hermaphrodite amphisporeangiate, *q.s.*

bisporangiate (bɪˈspɔːr.ən.ɡɪ.ət) *n.* [L. *bis* twice Gk. *spora* seed; *angreion*, vessel.] Having both micro- and megasporangia *appl.* strobilus consisting of both micro- and megasporophylls.

bistephanic (bɪˈstɛf.ən.ɪk) *n.* [L. *bis* twice Gk. *stephanos* crown.] Joining two points where coronal suture crosses superior temporal ridges.

bistipulate (bɪˈstɪp.jʊ.lət) *n.* [L. *bis* twice *stipula* stem.] Provided with two stipules.

blatrate (bɪˈblat.ɪt) *n.* [L. *bis* twice *stratum* layer] Having two layers *appl.* *g.* indumentum.

bistratose (bɪˈstrat.ɪt) *n.* [L. *bis* twice *stratum*, layer] With cells arranged in two layers.

**bisulcate** (bīśū'kāt) *n.* [L. *bis* twice *sulcus* groove.] Having two grooves.  
**bitemporal** (bītēm pōrāl) *n.* [L. *bis* twice *tempus*, temple.] *Appl.* two temporal bones a line joining posterior ends of two zygomatic processes.

**biterminal** (bītēr'nāl) *n.* [L. *bis* twice *terni* three by three.] Ternate with each division itself again ternate.

**bivalent** (bīvālēt, bīvālēt) *n.* [L. *bis*, twice; *valere* to be strong.] *Appl.* paired homologous chromosomes.

**bivalve** (bīvālv) *n.* [L. *bis* twice *valvus* folding door.] Consisting of two plates or valves, as a mussel shell or *appl.* a seed-capsule of similar structure.

**biventer cervicis** (bīvēr'tēr sēr'vī'sis) *n.* [L. *bis* twice *venter* belly *cervix* neck.] The spinale capitis, or medial part of semispinalis, a muscle of neck, consisting of two fleshy ends with narrow tendinous portion in middle.

**biventral** (bīvēr'trāl) *n.* [L. *bis* twice *venter* belly.] *Appl.* muscles of the biventer type digastric *appl.* a lobule of the cerebellum.

**bivittate** (bīvīt'āt) *n.* [L. *bis* twice *vitta* band.] With two oil receptacles with two stripes.

**divium** (bīv'ium) *n.* [L. *bis* twice *via*, way.] Generally the posterior pair of ambulacral areas in certain Echinoida the two rays between which the madreporite lies.

**bladder** (blād'ēr) *n.* [A.S. *blædre* bag.] A membranous sac filled with air or fluid a cyst.

**bladderworm stage** — *cysticercus* stage in tape-worms.

**blade** (blād) *n.* [A.S. *blæd* leaf.] The flat part of leaf of grasses lamina.

**Blandin's glands** [P. F. Blandin French surgeon]. Anterior lingual glands glands of Nuhn.

**blastaea** (blāst'eā) *n.* [Gk. *blastos* bud.] A planaea or ciliated planula, a hypothetical stage in evolution.

**blastelasma** (blāst'elās'mā) *n.* [Gk. *blastos* bud *elasma* plate.] Any

germ layer formed after formation of epiblast and hypoblast.

**blastema** (blāst'ēmā) *n.* [Gk. *blastos*, bud.] Formative substance in an egg primordium of an organ thallus of a lichen.

**blastie** (blāst'ik) *n.* [Gk. *blastos* bud.] *Pert.* or stimulating enlargement by cell-division *appl.* trophic.

**blastocarpous** (blāst'ōkār'pōs) *n.* [Gk. *blastos* bud *karpos* fruit.] Developing while still surrounded by pericarp.

**blastochrome** (blāst'ōkēm) *n.* [Gk. *blastos* bud; *chroma*, vessel.] A reproductive individual in some Medusae.

**blastocholines** (blāst'ōkō'lēnz) *n. pl.* [Gk. *blastos* bud *choles* holding.] Various substances, present in sporangia seeds, and fruits, which prevent premature germination germination inhibitors.

**blastochyl** (blāst'ōkī) *n.* [Gk. *blastos* bud *chylis* juice.] The fluid in a blastocoel or segmentation-cavity.

**blastocoel** (blāst'ōs'el) *n.* [Gk. *blastos* bud *choles* hollow.] The segmentation-cavity cavity of a blastula.

**blastocolla** (blāst'ōkō'lā) *n.* [Gk. *blastos* bud *collis*, glue.] A gummy substance coating certain buds.

**blastocone** (blāst'ōkōn) *n.* [Gk. *blastos* bud *konos* cone.] An outer larger cell of first circumferential division, in segmentation of certain eggs.

**blastocyst** (blāst'ōs'ist) *n.* [Gk. *blastos* bud *kystis* bladder.] The germinal vesicle.

**blastocyte** (blāst'ōs'it) *n.* [Gk. *blastos* bud *kystis* hollow.] Any undifferentiated embryonic cell.

**blastoderm** (blāst'ōd'ēr'm) *n.* [Gk. *blastos* bud *derma* skin.] The germinal disc.

**blastodermic vesicle** — hollow sphere of cells, an early stage in development of a fertilized ovum.

- blastodisc** (bläs'tōdīsk) *n.* [Gk. *blastos* bud *diskos* disk.] The germinal area of developing ovum.
- blastogenesis** (bläs'tōjēn'ēsis) *n.* [Gk. *blastos* bud *genesis* descent.] Gemination or reproduction by budding transmission of inherited characters by means of germ-plasm only.
- blastogenic** (bläs'tōjēn'ik) *a.* [Gk. *blastos* bud *genesis* offspring.] *Appl.* Inactive (idioplasm unalterable) till time and place of activity reached arising from changes in germ cells; *appl.* characteristics of germinal constitution.
- blastokinesis** (bläs'tōkīnē'sis) *n.* [Gk. *blastos* bud *kinesis* movement.] Movement of embryo in the egg as in certain insects and cephalopoda.
- blastomer** (bläs'tōmēr) *n.* [Gk. *blastos* bud *meros* part.] One of the cells formed during primary divisions of an egg cleavage cell.
- blastoneuropore** (bläs'tōmī rōpōr) *n.* [Gk. *blastos* bud *neuros*, nerve; *poros* passage.] A temporary passage connecting blastopore and neuropore.
- blastophore** (bläs'tōfōr) *n.* [Gk. *blastos* bud *phoros*, to bear.] Embryonic origin of plume the reproductive body in Alcyonaria central part of spermatocyte mass which remains unchanged through spermatogenesis in Annelida.
- blastophthoria** (bläs'tōfthō'ria) *n.* [Gk. *blastos* bud *phthora*, corruption.] Any injurious effect on germ cells or on germ plasm.
- blastopore** (bläs'tōpōr) *n.* [Gk. *blastos* bud *poros* passage.] Channel leading into archenteron of gastrula.
- blastospher** (bläs'tōsfēr) *n.* [Gk. *blastos* bud *sphaera* globe.] The blastula blastodermic vesicle hollow ball of cells.
- blastospore** (bläs'tōspōr) *n.* [Gk. *blastos* bud *spheros* seed.] An attached thallospore developed by budding and itself capable of budding as of yeast cells.
- blastostyl** (bläs'tōstīl) *n.* [Gk. *blastos* bud *stylos* pillar.] Hydrosma, a columniform zooid with or without mouth and tentacles, bearing gonophores.
- blastote** (bläs'tōtē) *n.* [Gk. *blastos* bud *te* see life.] An individual organism produced by budding.
- blastozooid** (bläs'tōzōid) *n.* [Gk. *blastos* bud *zoos*, animal; *zoides* form.] A larval bud in precocious budding in ascidians.
- blastula** (bläs'tūla) *n.* [L. *blastula* from Gk. *blastos* bud.] A hollow ball of cells, with wall usually one layer thick blastosphere.
- blastulati** (bläs'tūlā'shūn) *n.* [L. *blastula*, little bud.] Formation of blastulae.
- bleeder**—an individual subject to haemophilia, *q.v.*
- bleeding of plants**, exudation of watery sap from vessels at cut surface, due to root pressure.
- blended inheritance**,—mixed race or descent mingling or non-segregation of parental character mix.
- bleeding** (blēs'dīng) *n.* [A.S. *blēdan* to mix.] A racial hybrid.
- blanoid** (blēn'oid) *a.* [Gk. *blanous* mucous *eidos* form.] Resembling mucus.
- blaphar** (blēf'ārēl) *a.* [Gk. *blapharos*, eyelid.] *Part* eyelids.
- blapharoplast** (blēf'ārōplāst) *n.* [Gk. *blapharos* eyelid; *plastos* for mod.] A basal granule in relation with a motor cell gran., as the flagellum of Flagellata blapharoblast.
- blight** (blīt) *n.* [A.S. *blacian* to grow pale.] An insect or fungus producing plant disease the disease itself.
- blind pit**,—a cell-wall pit which is not backed by a complementary pit.
- blind spot**,—region of retina devoid of rods and cones and where optic nerve enters optic disc.

blister (blî'stêr) *n.* [A.S. *blæstan* to blow.] A subcutaneous bubble or bladder filled with fluid a certain plant disease.

blood (blôd) *n.* [A.S. *blôð* blood.] The fluid circulating in the vascular system of animals, distributing food-material and oxygen and collecting waste products.

blood cells,—cells derived by mitosis from ordinary mesoderm cells primitive haematoblasts.

blood crystals,—crystals of haemoglobin haemin, or haematoidin, which form when blood is shaken *p* with chloroform or ether

blood dust,—fine droplets of neutral fats present in the blood stream haemokonia.

blood gills,—delicate blood-filled sacs functioning in place of gills, in certain insects.

blood groups,—types of blood depending on presence or absence of two glytinogens (A and B) in the red corpuscles and two agglutinins (or anti A and  $\beta$  or anti-B) in serum or plasma. A cells agglutinate with B type serum. B with A type, AB with A and B type and O cells not agglutinating with A and B types. / universal donor universal recipient.

blood islands,—isolated reddish patches in mesoderm, in which primitive erythroblasts are found enclosed in a mesodermal syncytium blood anlage haemangioblast.

blood platelets,—colourless bodies about one-third the size of red corpuscles, and formed from megakaryocytes and agglutinating in shed blood thrombocytes thromboplasts.

blood plates,—minute amoeboid protoplasmic bodies found in blood.

blood serum—fluid or plasma left after removal of corpuscles and fibrin.

blood vessel—any vessel or space in which blood circulates strictly used only in regard to special vessels with well-defined walls

bloom,—a layer of wax particles on external surface of certain fruits, as grapes, peaches blossom or flower

blubber (blûb êr) *n.* [M.E. *blaber* a bubble.] Fat of whales, seals, etc. lying between outer skin and muscle layer

blue timber—a wood disease produced by fungus causing a bluish discoloration.

body blight,—fungal disease of trees.

body cavity—coelom or space in which viscera lie mesodermal in origin, and schizocoelic or enterocoelic in development considered primarily the generative cavity

body cell—a somatic cell as distinct from a germ cell an antheridial cell.

body stalk,—a band of mesoderm connecting caudal end of embryo with chorion.

Bojanus, organ of [L. H. Bojanus Abatian zoologist]. Excretory organ in lamellibranchs.

bon (bôn) *n.* [A.S. *bon* bone.] Connective tissue in which the ground-substance contains salts of lime.

bone-beds,—deposits formed largely by remains of bones of fishes and reptiles, as Liassic bone-beds.

bones of Bertin [E. J. Bertin French anatomist]. Thin anterior coverings of sphenoidal sinuses.

bonitation (bônî-tâ-shûn) *n.* [L. *bonitas* goodness.] The evaluation of the numerical distribution of a species in a particular locality or season, in relation to agricultural, veterinary or medical implications.

book gill—a gill composed of delicate leaf like lamellae placed one over the other like leaves of a book, as seen in *Limulus*.

book lung—a gill similar to book gill, but modified for air breathing and open to exterior only by a small slit, as in scorpions.

booted (boot'éd) *n.* [O.F. *boote* boot.] Equipped with raised horny plates of skin as feet of some birds

- bordered pit,—a form of pit, developed on walls of tracheids and wood vessels, with overarched border of secondary cell-wall.
- boreal (bō'réəl) *a.* [*L. boreus* north wind.] *Appl* or *part* northern biogeographical region holarctic except Sonoran, or restricted to nearctic *part* post-glacial ge with continental type of climate.
- boscelated (bō'selātēd) *a.* [*M.E. besse* knob] Covered with knobs.
- bosset (bō'sēt) *n.* [*M.E. besse* knob] The beginning of horn formation in deer in the first year.
- bostryx (bō'strīks) *n.* [*Gk. bostry* *her* curl.] A helical cyme cymose inflorescence with blossoms on only one side of axis.
- Botali's duct [*L. Botalli* Italian surgeon]. Ductus arteriosus a small blood vessel representing sixth gill arch and connecting pulmonary with systemic arch.
- botany (bō'tanī) *n.* [*Gk. botanē* pasture.] The branch of biology dealing with plants.
- bothridium (bōth'rīd'ium) *n.* [*Gk. bothros* trench *saxon, dim*] A muscular cup-shaped outgrowth from scolex of tape-worms.
- bothridium (bōth'rīd'ium) *n.* [*Gk. bothros* trench.] A sucker sucking groove in scolex of tape-worms.
- botryoidal (bōtrīō'idāl) *a.* [*Gk. botrys* bunch of grapes *saxon* form.] In the form of a bunch of grapes *appl* tissue of branched canals surrounding enteric canal in leeches.
- botryose (bō'trīō's) *a.* [*Gk. botrys* bunch of grapes.] Racemose botryoidal.
- botuliform (bōt'ulī'fōrm) *a.* [*L. botulus* sausage *formus* form.] Sausage-shaped allantoid.
- bouillon (booyōng) *n.* [*F. bouillon* broth.] An infusion or broth, containing watery extract of meat, also peptone for the cultivation of bacteria.
- bouquet (bookē book 2) *n.* [*F.*

*bouquet* nosegay] Arrangement of chromosomes in loops with their ends near one side of nuclear wall during sygotene and pachytene in some organisms.

bouton (boōtōng) *n.* [*F. bouton* bud.] Terminal bulb of arborescence of an axon labelium in Hymenoptera.

Bowman's capsule [*Sir W. Bowman* English histologist]. The vesicle of a renal tubule capsule glomeruli.

Bowman's glands,—serous glands in corium of olfactory mucous membrane.

Bowman's membrane,—anterior elastic membrane of cornea.

braccat (brīk'āt) *a.* [*L. braccus* breeches.] Having additional feathers on legs or feet *appl* birds.

brachylytrous (brāk'ī'lytrūs) *a.* [*Gk. brachy* short *lytron* sheath.] Having short wing-covers.

brachia (brāk'īā) *n. pl.* [*L. brachium* arm.] The arms two spirally coiled structures, one at each side of mouth, in Brachiopoda cerebellar peduncles white lateral bands of collenuli of corpora quadrigemina. *Sbg* brachium.

brachial (brāk'īāl) *a.* [*L. brachium*, arm.] *Part* arm arm-like.

brachialis (brāk'īāl'is) *n.* [*L. brachium* arm.] A flexor muscle of the forearm, from lower half of front of humerus to coronoid process of ulna brachialis anticus.

brachiate (brāk'īāt) *a.* [*L. brachium* arm.] Branched having opposite paired branches on alternate sides.

brachidia (brāk'īd'īā) *n. pl.* [*Gk. brachion* arm *saxon dim*] Calcareous skeleton supporting brachia in certain Brachiopoda.

brachiferous (brāk'ī'fērūs) brachigerous (brāk'ī'jērūs) *a.* [*L. brachium* arm *fero* carry to carry] Branched.

brachiocephalic (brāk'īō'kēfāl'ik, -āl) *a.* [*L. brachium* arm *Gk. kephale* head.] *Part* arm and head *appl* artery



**brachicubital** (bräk'tskü'bital) *n.* [*L. brachium* arm *cubitus* fore arm.] *Part.* arm and forearm.

**brachiolaria** (bräk'ölä räl) *n.* [*L. brachium* small arm.] A larval stage in metamorphosis of some starfishes.

**brachiole** (bräk'iöl) *n.* [*L. brachium* small arm.] A pinnule-like structure on ambulacral margin in Blastoida.

**brachiorachidian** (bräk'töräkid'iän) *n.* [*Gk. brachion* arm *rachis* spine.] *Part.* arm and spine.

**brachioradialis** (bräk'törädial'is) *n.* [*L. brachium* arm *radius* ray.] The supinator longus muscle of forearm.

**brachium** (bräk'iäm) *n.* [*L. brachium* arm.] Arm or branching structure upper limb of vertebrates a bundle of fibres connecting cerebellum to cerebrum or to pons.

**brachyblast**,—**brachyplast**, *g.s.*

**brachycephalic** (bräk'tkäfäl'ik -self) *n.* [*Gk. brachys* short *cephalic* head.] Short-headed with cephalic index of over eighty of dolichocephalic.

**brachycerous** (bräkt'sértis) *n.* [*Gk. brachys* short *cerus* horn.] Short horned with short antennae.

**brachycnemic** (bräk'tknē'mik) *n.* [*Gk. brachy* short *cneme* tibia.] *Appl.* arrangement of mesenteries of *Zonitarsa* where the sixth protoconeme is imperfect.

**brachydactyli** (bräk'däkt'il'iäl) *n.* [*Gk. brachys*, short *dactylus* digit.] Brachydactylos condition viz. having digits abnormally short.

**brachydont** (bräk'idönt) *n.* [*Gk. brachys* short *odont* tooth.] *Appl.* molar teeth with low crowns also brachyodont.

**brachymelosis** (bräk'tmölös'is) *n.* [*Gk. brachys* short *melos* smaller.] A third karyokinetic or second reduction division, as in asci meiosis involving only on division.

**brachyodont**,—**brachydont** *g.s.*

**brachyurous**,—**brachyural** *g.s.*

**brachyplast** (bräk'tplast) *n.* [*Gk. brachys* short *plastis* formed.] A short branch or spur bearing leaf tufts occurring with normal branches on the same plant.

**brachypleural** (bräk'tploö räl) *n.* [*Gk. brachys* short *pleuron* side.] With short pleura or side plates.

**brachypodous** (bräktip'ödüs) *n.* [*Gk. brachys* short *podus* foot.] With short legs, or stalk.

**brachyptero** s (bräktip'tértis) *n.* [*Gk. brachys* short *pteron*, wing.] With short wings.

**brachyscleroid** (bräk'tsklēr'id) *n.* [*Gk. brachys* short *scleros* hard *eides* f rm.] A stone cell.

**brachysm** (bräk'tsm) *n.* [*Gk. brachys* short.] Dwarfism in plants caused by shortening of inter nodes.

**brachystomatous** (bräk'tstöm'ärtis) *n.* [*Gk. brachys* short *stoma*, mouth.] With short proboscis *appl.* certain insects.

**brachytic** (bräkt'ik) *n.* [*Gk. brachys* shortness.] Dwarfish, *appl.* plants; exhibiting or short brachysm.

**brachyural** (bräk'tü räl) *n.* [*Gk. brachys* short *oura*, tail.] Having short abdomen usually tucked in below thorax *appl.* certain crabs.

**brachyurio** (bräk'tü rik) *n.* [*Gk. brachys* short *oura*, tail.] Short tailed.

**bract** (bräkt) *n.* [*L. bractea* thin plate of metal.] A floral leaf; a modified leaf in whose axil a flower arises a hydrophyllum in Siphonophora distal extre of sixth ppendage of Apus.

**bract scales**,—small scales developed directly on axis of coxae of ovuliferous scales.

**bracteal** (bräk'täl) *n.* [*L. bractea*, thin metal plate.] Like bract bractiform.

**bracteate** (bräk'täkt) *n.* [*L. bractea*, thin metal plate.] Having bracts.

**bracteolat** (bräk'töläl) *n.* [*L. bractea* thin metal plate.] *Appl.* flowers with bracteoles.

bract ole (brák'téól) *n*. [L. *bractea*, the metal plate.] Secondary bract at base of flower bractlet.

bracteose (brák'téós) *a*. [L. *bractea*, thin metal plate.] With many bracts.

bractlet,—bracteole.

bradyaux als (brád'tóks'als) *n*. [Gk. *bradys* slow; *auxes* growth.] Relatively slow growth of a part at a slower rate than that of the whole *appl* tachyaux als.

brady nesis (brád'tjén'ésis) *n*. [Gk. *bradys* slow; *genesis*, descent.] Retarded development, in phylogeny *appl* tachygenesis.

bradytelic (brád'tél'ík) *a*. [Gk. *bradys* slow; *telos* fulfillment.] Evolving at a rate slower than the standard rate; *appl* tachytelic of horotelic.

brain (brén) *n*. [O.E. *brægen* brain.] Centre of nervous system mass of nervous matter in vertebrates at anterior end of spinal cord, lying in cranium in invertebrates, supra-oesophageal or suprapharyngeal ganglia.

brain sand,—granular bodies of calcium and ammonium and magnesium phosphates, occurring in pineal gland and pia mater corpora amylacea acervulus cerebri.

branchia (bräng'kiá) *n*., branchiae (bräng'kié) *pln*. [Gk. *branchia*, gills.] Gills.

branchia (bräng'kiák) branchial (bräng'kiál) *a*. [Gk. *branchia*, gills.] Part gills.

branchial arch,—one of the bony or cartilaginous arches on side of the pharynx posterior to hyoid arch, and supporting gill bars.

branchial grooves,—outer pharyngeal grooves or visceral clefts, *q.v*

branchiate (bräng'kiát) *a*. [Gk. *branchia*, gills.] Having gills.

branchicolous (bräng'ki'ólús) *a*. [Gk. *branchia*, gills; L. *color* to inhabit.] Parasitic on fish gills *appl* certain crustaceans.

branchiform (bräng'ki'fórm) *a*. [Gk.

*branchia*, gills; L. *forma* shape] Gill-like.

branchiobyal (bräng'kió'íál) [Gk. *branchia*, gills; *hyarides* T-shaped.] An element of a branchial arch.

branchiocardiac (bräng'kiókár'diák) *a*. [Gk. *branchia*, gills; *cardia* heart.] Part gills and heart *appl* vessel given off ventrally from ascidian heart *appl* vessels conveying blood from gills to pericardial spaces in certain crustaceans.

branchiomere (bräng'kiómér) *n* [Gk. *branchia* gills *meros* part.] A branchial segment.

branchiopallial (bräng'kiópál'iál) *a* [Gk. *branchia* gills; L. *pallium* mantle.] Part gill and mantle of molluscs.

branchiostegal (bräng'kiós'tégál) *a*. [Gk. *branchia* gills; *steges* roof.] With or part a gill cover *appl* membrane rays.

branchiostegite (bräng'kióstéj't) *n*. [Gk. *branchia* gills *steges* roof.] The branchiostegal membrane.

branchiostegite (bräng'kiós'téj't) *n* [Gk. *branchia*, gills; *steges* roof.] Expanded lateral portion of carapace forming gill cover in certain Crustacea.

branchiome (bräng'kiém) *n*. [L. *branchia* gills; *membr* ear] A branchiate limb locomotory and respiratory limb of Branchiopoda.

brand (bránd) *n*. [A.S. *brænan* to burn.] A burnt appearance on leaves, caused by fungi.

bregma (brég'má) *n*. [Gk. *bregma* fore-part of head.] That part of skull where frontals and parietals meet intersection of sagittal and coronal sutures.

brephe (bréf'ík) *a*. [Gk. *brepheia* childlike.] *Appl* larval phase preceding that of adult form; neanic.

brevica date (brév'ikó dát) *a*. [L. *brevis* short *cauda*, tail.] With short tail.

brevifoliate (brév'ifó'liát) *a*. [L. *brevis* short *folium*, leaf.] Having short leaves.

brevilingular (brēv'ling'gwāl) *a.* [L. *brevis* short *lingua* tongue] With short tongue.

breviped (brēv'ipēd) *a.* [L. *brevis* short *pes* foot.] H wing short legs *appl.* certain birds.

brevipennate (brēv'ipēn'it) *a.* [L. *brevis* short *penna*, feather] With short wings.

brevirostrata (brēv'irōs'trāt) *a.* [L. *brevis* short *rostrum* beak.] With short beak or rostrum.

brevissimus oculi, —obliq us inferior shortest muscle of eye.

bridge corpuscle, —desmosome, *q.v.*

Boca s area [P P Bocca, French surgeon]. Parolfactory area of brain.

Broca gyrus, —left inferior frontal gyrus, speech centre in cerebral cortex.

brochid drome (brōkīd'ōdrōm) *a.* [Gk. *brachos* loop *dromos* to run.] *Appl.* veins in leaves when they form loops within th blade.

brochonema (brōkōnē mā) *n.* [Gk. *brachos* loop *nema*, thread.] The spireme in loops is the number of chromosome pairs to be formed

brumatium (brōmā shiūm) *n.* [Gk. *bruma*, food.] A swelling on a fungus cultivated by ants, and serving as food

bronchi (brōng'kī) *n plu* [Gk. *brongchos* windpipe] Tubes connecting trachea with lungs. *Sing* bronchus.

bronchi (brōng'kiā) *n plu* [Gk. *brongchos* windpipe.] Th subdivisions or branches of each bronchus.

bronchial (brōng'kiāl) *a* [Gk. *brongchos* windpipe.] *Part* bronchi.

bronchiol (brōng'kiōl) *n.* [Gk. *brongchos* windpipe.] A small terminal branch of bronchi.

bronchopulm nary (brōng'kōpūl'mōnāri) *a.* [Gk. *brongchos* wind pipe L. *pulmo* lung] *Part* bronchi and lungs.

bronchotracheal (brōng'kōtrāk'eāl) *a.* [Gk. *brongchos* windpipe L. *trachea*, trachea.] *Part* bronch and trachea.

bronchovesicular (brōng'kōvēsūk'ā lār) *a* [Gk. *brongchos* windpipe L. *vesicula*, little sac.] *Part.*

bronchial tubes and lung cells.

bronchus, —*sing* of bronchi.

brood bud, —a spore of certain types of sporangia a soridium a bulbil

brood cells, —gonidia, *q.v.*

brood pouch, —a sac-like cavity in which eggs or embryos are placed a space formed by overlapping plates attached to bases of thoracic limbs in certain Crustacea.

brown body —a brown, rounded mass of compacted degenerate organs in some polyzoa nephrocyte in ascidians.

brown funnels, —a single pair of organs on dorsal aspect of posterior end of pharynx, in Amphioxus atrio coelomic funnels brown canals.

Brownian movements [R. Brown, Scottish botanist]. The passive vibratory movements of fine granules when suspended in a fluid.

Bruch a membra e [C W L Bruch German anatomist] The basal membrane inner layer of choroid lamina basalis.

Brunner's glands [J C Brunner Swiss anatomist]. Small tubuloracemose glands containing proteolytic enzyme, in submucous coat of small intestine; duodenal glands.

bryology (brīōl'ōjī) *n.* [Gk. *bryos*, moss *logos* discourse.] The science dealing with mosses, also with liverworts muscology

bryophyte (brīōfīt) *n.* [Gk. *bryos*, moss; *phyton* plant.] Any of the mosses or liverworts.

bryozoon (brīōzōōn) *n.* [Gk. *bryos* moss *zōon* animal.] A polyzoon, so named from moss-like appearance.

B-substance, —intermedin *q.v.*

bucca (būk'ē) *n plu* [L. *bucca* cheek.] The cheeks.

buccal (būk'āl) *a.* [L. *bucca*, cheek] *Part* the cheek or mouth.

buccinator (būk sinō'tōr) *n* [L. *buccinator* trumpeter] A broad thin muscle of the cheek.

**buccolabial** (būk'olā'bāl) *n.* [L. *bucca* cheek *labium* lip.] *Part* mouth cavity and lips.

**buccolingual** (būk'ōlōg'gwāl) *n.* [L. *bucca*, cheek *lingua*, tongue.] *Part* cheeks and tongue.

**bucconasal** (būk'ōnā'sāl) *n.* [L. *bucca* cheek *nasus* nose.] *Part* cheek and nose *appl* membrane closing posterior end of olfactory pit.

**buccopharyngeal** (būk'ōfērīn'jāl) *n.* [L. *bucca* cheek Gk. *pharynx* throat.] *Part* cheeks and pharynx *appl* membrane and fascia.

**bud** (būd) *n.* [M.E. *buddle* bud.] A rudimentary shoot, or flower *n.* a *germ*.

**budding** (būd'īng) *n.* [M.E. *buddle* bud.] A method of reproduction seen in many primitive animals.

**buffer** (būf'er) *n.* [O.F. *buff* blow] *Appl.* salt solution which minimizes changes in pH when an acid or alkali is added *appl.* genes controlling the action of an allelomorph, i.e. polygenes.

**buf. toxins** (būf'tōks'āīna) *n. plu.* [L. *buf* toad Gk. *toxikon*, poison.] Toad venom, as bufotoxin,  $C_{24}H_{48}O_{12}$  and bufonin,  $C_{24}H_{44}O_{12}$ .

**bulb** (būlb) *n.* [L. *bulbus* globular root.] A specialized underground bud with thick fleshy leaves a part resembling bulb bulb-like dilatation basal part of intro-mittent organ in spiders the medulla oblongata.

**bulbar** (būl'bār) *n.* [L. *bulbus* globular root] *Part* bulb or bulb-like part *part* medulla oblongata.

**bulbiferous** (būlbīf'erūs) *n.* [L. *bulbus* bulb *ferre* to carry] Bulb-bearing.

**bulbil** (būl'bīl) *n.* [L. *bulbus* bulb] A fleshy axillary bud which may fall and produce new plant, as in some lilies aerial bulb any small bulb-shaped structure or dilatation.

**bulbocavernosus** (būl'būkāvērno'sūs) *n.* [L. *bulbus* bulb *cavernosus* cavernous.] A musclic of peniacum, ejaculator urinae in the male sphincter of vagina.

**bulbonuclear** (būl'bōnū'klār) *n.* [L. *bulbus* bulb *nuclear* kernel.] *Part* medulla oblongata and nuclei of cranial nerves.

**bulbo-urethral** (būl'bōd'ūthrāl) *n.* [L. *bulbus* bulb Gk. *urethra*, urethra.] *Appl* two racemose glands Cowper's or Mery's glands opening into bulb of male urethra also *appl* the greater vestibular glands, Bartholin's glands, in the female.

**bulbous** (būl'būs) *n.* [L. *bulbus* bulb.] Like bulb developing from bulb having bulba.

**bulbus** (būl'būs) *n.* [L. *bulbus* bulb.] A bulb swollen base of stipe in agarics the knob-like part found in connection with various nerves dilatation (base of aorta).

**bull** (būl'ā) *n.* [L. *bulba*, bubble.] *Appl.* rounded prominence formed by bones of ear tympanic bulla; *appl.* prominence of middle ethmoidal air cells.

**bullat** (būl'āī) *n.* [L. *bulba*, bubble.] Blistered-like pockered like savoy-cabbage leaf.

**bulliform** (būl'īfōrm) *n.* [L. *bulba*, bubble *forme* shape.] B bubble-shaped *appl* thin-walled cells which cause rolling, folding or opening of leaves by turgor changes.

**bulb sheath**,—a layer of large parenchymatous cells surrounding vascular tissue of leaf-vein.

**bunodont** (bū nōdōnt) *n.* [Gk. *bunco* as mound *odous* tooth.] Having molar teeth with low conical cusps.

**bunoid** (bū nōid) *n.* [Gk. *bunco* as mound *oides* form.] *Appl.* cusps of cheek teeth, low and conical.

**bunolophodont** (bū nōlōf'ōdōnt) *n.* [Gk. *bunco* as mound *lophos* crest *odous* tooth.] Between bunodont and lophodont in structure, *appl.* cheek-teeth.

**bunoseleodont** (bū nōsēl'ē'nōdōnt) *a.* [Gk. *bunus* mound *seleus* moon *odous* tooth.] Having internal cusps bunoid external selenoid *appl* cheek teeth

**bursa** (būr'sā) *n.* [L. *bursa* purse.] A sac-like cavity a sac with viscid fluid to prevent friction t joints.

**bursa copulatrix**,—a genital pouch of various animals.

**bursa entiana**,—the short duodenum in Chondropterygii.

**bursa Fabricii**,—a sac pening no dorsal part of posterior region of cloaca in birds, and usually degenerating during dolenceoca.

**bursical** (būr'sikūl) *n.* [L. *bursa* of *bursa*, purse.] A small sac.

**buttress-roots**,—branch root given off above ground, arching away from stem before entering soil forming additional props.

**butyriase** (bū'tirīās) *n.* [L. *butyrum* butter] An enzyme occurring in blood serum.

**bysal** (bisāl) *n.* [Gk. *bysos* fine flax.] *Part* the byssus.

**bysogenous** (bisōj'ēnds) *n.* [Gk. *bysos* fine flax *genesis* birth] Byssus-forming *appl* glands.

**bysoid** (bisōid) *n.* [Gk. *bysos* fine flax *eidos* shape.] Resembling a byssus formed of fine threads byssaceous.

**byssus** (bis'is) *n.* [Gk. *byssos* fine flax.] The tuft of strong filaments secreted by a gland of certain bivalve mollusca, by which they become attached the stalk of certain fungi.

## C

**cacogenesis** (kāk ojen'ēis) *n.* [Gk. *kakos* bad *genesis* descent.] Inability to hybridize kakogenesis.

**cacogenic** (kāk ojen'tik) *n.* [Gk. *kakos* bad *genesis* birth.] Dysgenic, *q v*

**cadophore** (kād'ōfōr) *n.* [Gk. *kados* cask *phorē* t bear] A dorsal

bad-bearing outgrowth in certain tunicates.

**caducibranchiate** (kādū'sibrāng'kilit) *n.* [L. *caducus* falling *branchiae* gills.] With temporary gills.

**caducous** (kādū'kūs) *n.* [L. *caducus* falling] *Part* parts that fall off early *eg* calyx stipules fugacious of deciduous.

**caecal** (sē'kāl) *n.* [L. *caecus*, blind.] Ending without outlet; *appl* stomach with cardiac part prolonged into blind sac *part* caecum.

**caecum** (sē'kām) *n.* [L. *caecus* blind.] A blind diverticulum or pouch from some part of alimentary canal.

**caecum cupulare**,—the closed apical end of the cochlear canal.

**Caen gaes** (sē'nōj'sē) *n.* [Gk. *kainos* recent *gaia* earth.] A zoogeographical region which includes the Nearctic, Palearctic and Oriental regions of Eogaea also Cainogea, kainogaea

**caenogenesis** (sē'nōjen'tēis) *n.* [Gk. *kainos* recent *genesis* origin.] The neo-phylogenetic processes in development of an individual development of transitory adaptations in early stages of an individual.

**caenogenetic** (sē'nōjen'tētik) *n.* [Gk. *kainos* recent *genesis* origin.] Of recent origin.

**Caenozoic** (sē'nōzō'ik) *n.* [Gk. *kainos* recent *zōē* life.] *Part* age of mammals, geological era from Mesozoic to recent times Tertiary and Quaternary periods also Cainozoic Cenozoic kainozoic.

**caespitose** (sēs'pitōs) *n.* [L. *caespes* turf] *Part* turf having low closely matted stems growing densely in tufts caespitulosae caespitose

**calisson** (kāl'sōn) *n.* [F. *calisson* coffer] Box-like arrangement of longitudinal muscle fibres in Lumbroidea.

**calamistrum** (kāl'āmī'trūm) *n.* [L. *calamistrum* curling-iron.] A comb-like structure on metatarsi of certain spiders.

**calamus** (kálámós) *n.* [*L. calamus* reed.] A hollow reed like stem without nodes the quill of a feather **calamus scriptorius** the tip of posterior part of foot of fourth ventricle.

**calcaneus** (káiká nēts) *n.* [*L. calx* heel.] The heel large bone on **calcus** of tarsus which forms heel **calcaneum** process on metatarsus of birds.

**calcar** (káikár) *n.* [*L. calcar* spur] A hollow prolongation or tube at base of sepal or petal spur like process on leg or wing of birds tibial spine in insects process of calcaneus which supports web between leg and tail in bats prehallux of frog internal bony plate strengthening neck of femur **calcar avis**, eminence in posterior part of lateral ventricle.

**calcarate** (káikárá) *n.* [*L. calcar* spur] Spurred *apfl* petal, corolla.

**calcareous** (káiká ts) *n.* [*L. calcaris* limy] Limy growing on soil derived from decomposition of calcareous rocks *part* limestone.

**calcariform** (káikárfórm) *n.* [*L. calcar* spur *forma*, shape.] Spurlike.

**calcarine** (káikárin) *n.* [*L. calcar* spur] *Part* **calcar avis** *apfl* fissure extending to hippocampal gyrus, on medial surface of cerebral hemisphere.

**calceol** (káikál) *n.* [*L. calx* lime *calere* to dwell.] A plant which thrives in soils rich in calcium salts **calcepete**, **calciophile**, **calciophyte** **gypsophyte**. *a.* **Calci colous**.

**calciferol**,—vitamin D<sub>2</sub> occurring in fish liver oils, egg yolk milk, etc. and conserving body calcium and phosphorus antirachitic vitamin isomeric with ergosterol from which it is formed by series of photochemical reactions C<sub>28</sub>H<sub>44</sub>O

**calciferous** (káiká'fús) **calciferous** (káiká'fús) *n.* [*L. calx* lime *ferre* to carry.] Containing or producing lime salts.

**calcificati** *n.* (káiká'fikáshún) *n.* [*L. calx* lime *facere* to make.] The

deposition of lime salts in tissue the process of accumulation of lime salt in soil development.

**calcifuge** (káikáifú) *n.* [*L. calx* lime *fuger* to flee.] A plant which thrives only in soils poor in calcium carbonate **calciphobe**.

**calcipete** (káikáipét) *n.* [*L. calx* lime *petere* to go towards.] A **calicole** *part* a **calciophil** plant.

**calciophile**,—**calciophyte**.

**calcioph** *be*,—**calcifuge**.

**calciophyte** (káikáifít) *n.* [*L. calx* lime *Gk. phytos* plant.] A plant which thrives only on calcareous soils **calicole** **calcipete** **calciophile** **gypsophyte**.

**calcivorous** (káikáiv'ús) *n.* [*L. calx* lime *vorare* to devour.] *Apfl* plants which live on limestone.

**calcospherites** (káikóséf'itis) *n.* *part* [*L. calx* lime *sphaera* globe.] Concentrically laminated granules of calcium carbonate in Malpighian tubes of some insects, in cells associated with fat-body in certain larval Diptera

**calicle**,—**calycle**, *part*

**calines** (káiké) *n.* *part*. [*Gk. kalain* to summon.] Plant hormones influencing growth of specific parts, as of root, stem or leaf.

**callous** (káikál) *n.* [*L. callus* hard.] *Part* **corpus callousum**.

**callose** (káikós) *n.* [*L. callosus* hard skin.] An occasional carbohydrate or periodic component of plant cell walls, as on sieve-plates. *a.* Having callosities.

**callosity** (káikós'itis) *n.* [*L. callus* hardness.] Hardened and thickened area on skin, or on bark.

**callow** (káikó) *n.* [*A.S. callu* bald.] A newly hatched worker ant. *a.* Unfedged.

**callus** (káikós) *n.* [*L. callosus* hard skin.] Tissue that forms over cut or damaged plant surface deposit of callose on sieve plates small hard outgrowth at base of spikelet or of flower in some grasses *a.* growth of shell-like material within umbilicus of shell *mesoconal* swelling in some insects **callosity**

caloricity (kāl'ôrîs'tî) *n*. [L. *calere* to be warm.] In animals, the power of developing and maintaining a certain degree of heat.

calorie (kāl'ôrî) *n*. [L. *calere* to be warm.] Amount of heat required to raise temperature of one gramme of water one degree centigrade (small calorie) one large calorie equals one thousand small calories.

calorigenic (kāl'ôrîjên'îk) *a*. [L. *calor* heat *gener* to beget.] Promoting oxygen consumption and heat production.

calotte (kāl'ôt) *n*. [F. *calotte* skull-cap.] An outer cell group or polar cap in Dicyemidae, for adhesion to kidney of Cephalopoda a retractile disc with sensory cilia in larval Bryozoa.

caltrop (kāl'trôp) *n*. [A.S. *calotroppa* thistle.] A sponge spicula with four rays so disposed that any three being on the ground the fourth projects vertically upwards also calthrop.

calvarium (kāl'vârî'ûm) *n*. [L. *calvus* bald.] The dome of the skull.

calix (kāl'îks) *n*. [L. *calix* lime beel.] Lime calcaneus *q.v*.

calycanthemy (kāl'îkân'thêms) *n*. [Gk. *kalys* calyx *anthêma* flower.] Abnormal development of parts of calyx into petals.

calyces,—*plur* of calyx

calycifloro (kāl'îkîf'ôrû) *n*. [L. *calyx* calyx *flor* flower.] *Appl* flowers which stamens and petals are adnat to the calyx.

calyciform (kāl'îkî'fôr'm) *a*. [L. *calyx* calyx *formis* shape.] Calyx-like in shape.

calycis (kāl'îkîs) *a*. [L. *calyx* calyx.] *Perit* calyx cup-like.

calycle (kāl'îkî) *n*. [L. *calyculus* little calyx.] An epicalyx cup-shaped cavity in coral theca in hydroid calyculus also calicle.

calyculus (kāl'îk'ûlûs) [L. *calyculus* little calyx.] C p-shaped or bowl-shaped structure calycle.

calyculus gustatorius,— taste-bud

or taste-bulb an ovoid buccal sense organ composed of gustatory cells supported and surrounded by sustentacular cells.

calyculus ophthalmicus,— optic cup, formed by invagination of the optic bulb and developing into the retina.

calymma—calymma *q.v*

calypter (kāl'îp'têr) *n*. [Gk. *kalypso* hidden.] Antitergite or modified alula covering haltere in certain *Diptera* calypteron.

calyptoblastic (kāl'îp'tôblîs'tîk) *a*. [Gk. *kalypso* hidden *blastos* bud.] *Perit* hydroids in which gonophore is enclosed in a gonotheca.

calyptobranchiate (kāl'îp'tôbrân'jîk) *a*. [Gk. *kalypso* hidden *branchia* gills.] With gills not visible from exterior.

calyptopsis (kāl'îp'tôp'sîs) *n*. [Gk. *kalypso* hidden *opsis* sight.] A larva with short-stalked eyes, as of some arthropods.

calyptra (kāl'îp'trâ) *n*. [Gk. *kalypso* covering.] Tissue enclosing developing sporogonium in liverworts remains of archegonium which surround apex of capsule in mosses neck of archegonium in prothallus of some pteridophytes root-cap of calyptragen.

calyptrate (kāl'îp'trât) *a*. [Gk. *kalypso* covering.] *Appl* caducous calyx separating from its lower portion or from thalamus operculate *Appl* *Diptera* with halteres hidden by squamae.

calyptrogen (kāl'îp'trôjên) *n*. [Gk. *kalypso* covering *gennao* to produce.] The special layer of cells lying at apex of growing root and giving rise to root-cap.

calyptron (kāl'îp'trôn) *n*. [Gk. *kalypso* covering.] The squama of *Calypterae* calypter.

calyx (kāl'îks) *n*. [Gk. *kalys* calyx.] The outer whorl of floral leaves cup-like portion of petals of kidney theca of certain hydroids cup-like body of crinoids cup or head of pedunculate bodies insects.

- cambial (kām'bīāl) *a.* [*L. cambii m* change.] *Part* cambium.
- cambiform (kām'bīfōrm) *a.* [*L. cambium* change *forma* shape.] Similar to cambium cells.
- cambilog etic (kām'bīlōjēnēt'ik) *a.* [*L. cambium* change *Gk. genesis* origin.] *Appl* cells which produce cambium.
- cambium (kām'bīōm) *n.* [*L. cambium* change.] The tissue from which secondary growth arises in stems and roots.
- Cambrian (kām'briān) [*L. Cambria, Wales.*] *Part* earliest period, or system of rocks, of Paleozoic era.
- cameration (kāmērā'shūn) *n.* [*L. caveratio* vaulting] Division into large number of separate chambers.
- camerostom (kām'erōstōm) *n.* [*L. camera* chamber *Gk. stoma* mouth.] Hollowed-out under surface of hood i certain Troglidae.
- campaniform (kāmpān'ifōrm) *a.* [*L. L. campana* bell *forma, shape.*] Bell- i dome-shaped *appl* sensilla.
- campanula Haller [*Dim. of L. L. campana, bell A von Haller* Swiss anatomist]. Expansion of falciform process at lens i many fishes.
- campanulate (kāmpān'itāt) *a.* [*Dim. of L. L. campana, bell.*] Bell shaped *appl* corolla.
- campodiform (kāmpō'dēfōrm) *a.* [*Gk. kampylos, caterpillar* *oides* form; *L. forma, shape.*] *Appl* larva resembling Campodea thysaniform.
- camptodrome (kāmp'tōdrōm) *a.* [*Gk. kampylos* flexible; *dromos* course.] *Part* leaf venation in which secondary veins bend forward and anastomose before reaching margin.
- camptotrichia (kāmp'tōtrik'ia) *n. plur.* [*Gk. kampylos* flexible *trichis* hair] Jointed dermal fin-rays in certain primitive fishes.
- campylospersuous (kāmpilōspēr'mūs) [*Gk. kampylos* curved

- forma* seed.] *Appl* seeds with groove along inner face.
- campylotropous (kāmp'itōtrōpūs) *a.* [*Gk. kampylos* curved *trope* turning] *Part* ovules in which nucellus and embryo-sac are bent so that micropyle points almost back to placenta.
- canallicular (kānāl'ik'ulār) *a.* [*L. canalliculus* small channel.] *Part* canals, or canalliculi.
- canallicular apparatus,—the Golgi bodies, regarded as system of canals.
- canaliculus (kānāl'ik'ulūs) *n.* [*L. canalliculus* small channel.] One of the small canals containing cell-processes of bone-corpuscles and connecting lacunae in Haversian system small channel for passage of nerves through various bones.
- canaliform (kānāl'ifōrm) *a.* [*L. canalis* canal *forma, shape.*] Canal-like.
- cancellous (kān'elūs) *a.* [*L. cancellatus* chambered.] Consisting of slender fibres and lamellae, which join to form reticular structure cancellated; *appl* inner more spongy portion of bony tissue *appl* anterior portion of cuttle-bone.
- cancerisocial (kāng'krēs'shāl) *a.* [*L. cancer* crab; *socialis* ally] *Appl.* commensals with crabs.
- canine (kān'n kē'n)n) *n.* [*L. canis* dog] The tooth next to incisor. *a. Part.* canine tooth, or to a fovea and eminence on anterior surface of maxilla.
- caninus (kān'ī'nūs) *n.* [*L. caninus* canine.] Muscle from canine fossa i angle of mouth levator anguli oris.
- canon bone —bone supporting limb from hock to fetlock, enlarged and fused metacarpals or metatarsals i birds, the tarsometatarsus.
- canopy (kān'ōpī) *n.* [*Gk. kanepeion* curtained bed.] Topmost layer of leaves, twigs and branches of forest trees, or of other woody plants.



cantharidin (kānthār'idīn) *n.* [*Cantharides* blister beetles, from Gk. *kantharos*] Poison from accessory glands of genital tract and blood of blister-beetles  $C_{12}H_{16}O_4$

canthus (kān'thūs) *n.* [Gk. *kanthos* corner of eye.] The angle where upper and lower eyelids meet commissure palpebrarum.

capillary (kāp'lārī) *a.* [*L. capillus* hair] Hair-like *appt* moisture held between and around particles of soil. *n.* One of minute thin-walled vessels which form networks in various parts of body e.g. blood lymph or biliary capillaries.

capitulum (kāp'itūlūm, kāp'itshūlūm) *n.* [*L. capillus* hair] A protoplasmic network of elaters or filaments embedding spores with sporangia of certain fungi.

capitate (kāp'itāt) *a.* [*L. caput* head.] Enlarged or swollen at tip gathered into a mass at apex as compound stigma, some inflorescences *appt* bone as capitulum.

capitatum (kāp'itātūm) *n.* [*L. caput* head.] The third carapace or magnum.

capitulum (kāp'itēlūm) *n.* [*Dim* of *L. apud* head] A capitulum or articulatory protuberance at end of bone.

capitulum (kāp'itūlūm) *n.* [*L. caput* head.] A knob-like swelling at end of a bone, *g* on humerus for articulation with radius part of cirripeds body enclosed in mantle *appt* peduncle swollen end of hair or tentacle enlarged end of insect proboscis, antenna exert part of head in ticks part of column above parapet in sea-anemones spherical cell at inner end of manubrium in Characeae head or anthodium, an inflorescence of small flowers or florets crowded together on receptacle and usually surrounded by an involucre.

capreol *fr* (kāprē'ōlī kāprē'ōlī) *a.* [*L. capreolus* tendril.] S *appt* with tendrils tendril-shaped.

caprification (kāp'rifikā'shūn) *n.* [*L.*

*apricus* wild fig-tree] Pollination of flowers of fig tree by Chalcid insects.

capsule (kāpsūl) *n.* [*L. capsula*, little box.] A sac-like membrane enclosing an organ thickened silene layer surrounding certain bacteria any closed box like vessel containing spores seeds, or fruits sporogonium in Myriophyta a superior one or more celled many seeded dehiscent fruit membrane surrounding nerve-cells of sympathetic ganglia.

capsuliferous (kāpsūlīf'ērūs) *a.* [*L. capsula*, little box *ferre* to carry] With or forming a capsule capsuligerous capsulogenous.

captacula (kāptāk'ulā) *n. pl* [*L. capere* to lie in wait for] Exsertile filamentous tactile organs near mouth of Scaphopoda.

caput (kāp'ūt) *n.* [*L. caput* head.] Head knob-like swelling at apex peridium of certain fungi.

caput caecum coli,—former name of caecum

carapace (kā'rāpīs) *n.* [*Sp. carapacho* covering] A chitinous or bony shield covering whole or part of back of certain animals.

carbohydrates (kā'r'bōh'drāts) *n. pl.* [*L. carbo* coal Gk. *hydrō* water] Compounds of carbon, hydrogen and oxygen, aldehydes or ketones constituting sugars, or condensation products thereof

carbon dioxide (kā'r'bōn dī'ōk'sīd) *n.* [*L. carbo* coal Gk. *di* two *sys* sharp.] Carbonic acid gas, heavy colourless gas present in the atmosphere, assimilated by plants and produced by decomposition of organic substances  $CO_2$ .

Carboniferous (kā'r'bōnīf'ērūs) *a.* [*L. carbo* coal *ferre* to carry] Part period of late Palaeozoic era including formation of coal measures.

carcerul (kā'r'ērūl) *n.* [*L. carcer* prison.] A superior dry many celled fruit with indehiscent one- or few-seeded carpels cohering by united styles to central axis.

carcinology (kăr'stöl'ôjî) *n.* [Gk. *karkinos* crab *logos* discourse.] The study of Crustacea.

cardia (kăr'dîă) *n.* [Gk. *kardia* stomach.] The opening between oesophagus and stomach.

cardiac (kăr'dîăk) *a.* [Gk. *kardiakos* *perit* heart, stomach.] *Perit* near or supplying heart *appl* cycle etc *perit* anterior part of stomach.

cardia impulse,—motion caused by rapid increase in tension of ventricle.

cardinal (kăr'dînl) *a.* [L. *cardo* hinge.] *Perit* that upon which something depends or hinges *perit* hinge of bivalve shell, or to cardo of insects *appl* points for plant growth minimum optimum and maximum temperatures or temperature ranges.

cardial sinuses and veins,—veins uniting in Cuvier's duct persistent in most fishes, embryonic in other vertebrates.

cardi blast (kăr'dîblăst) *n.* [Gk. *kardia*, heart *blastos* bud.] One of embryonic cells destined to form walls of heart.

cardi branchial (kăr'dîbrăng'kiâl) *a.* [Gk. *kardia* heart *branchialis*, gills] *Appl* enlarged posterior basibranchial cartilage ventral to heart in chemobranchia.

card (kăr'dô) *n.* [L. *cardo* hinge] The hinge of a bivalve shell basal sclerite of maxilla in insects itself divided into eucardo and paracardo.

carina (kăr'îă, kăr'îă) *n.* [L. *carina* keel.] A keel-like ridge on certain bones, as breast-bone of birds median dorsal plate of barnacle the two coherent anterior petals of leguminous flower ridge on bracts of certain grasses.

cartinal (kăr'îăl) *a.* [L. *carina*, keel.] Like or *perit* keel or ridge *appl* median strand of xylem passing from stem to leaf *appl* canals in protoxylem beneath ridges of stem in Equisetales *appl* dots or puncta on keel of diatom valves

carinate (kăr'îăl) *a.* [L. *carina* keel.] Having a ridge or keel.

cariniform (kăr'îăfôrm) *a.* [L. *carina* keel *forma* shape.] Keel-shaped.

carassial (kără'siâl) *a.* [L. *caro* flesh.] *Perit* cutting teeth of Carnivora, fourth premolar above and first molar below — in upper the protocone is reduced, in lower the metaconid.

carnivorous (kăr'nîv'ôris) *a.* [L. *caro* flesh *vorare* to devour] Flesh-eating *appl* Carnivora, and to certain plants which feed on entrapped insects.

carotennae (kăr'ôtenk) *n.* [L. *carota*, carrot.] A liver enzyme which activates vitamin A formation from carotenes.

caroten (kăr'ôten) *n.* [L. *carota* carrot.] A yellow pigment synthesized by plants and present in milk, liver oils, egg yolk etc. provitamin A  $C_{40}H_{56}$ .

carotenoids (kăr'ôtenôids) *n.* *plu* [L. *carota*, carrot; Gk. *eidos* form.] Pigments occurring in plants and some animal tissues, and including carotene, xanthophylls, and other fat-soluble pigments.

carotid (kăr'ôtid) *n.* [Gk. *karnos* heavy sleep.] *Perit* chief arteries in the neck *appl* arch, ganglion, nerve, etc.

carotid bodies,—two small masses of chromaffin cells associated with carotid sinuses, and being part of system for controlling oxygen content and acidity of blood glomera carotica.

carotin,—carotene *gm*

carotenoids,—carotenoids, *gm*

carpal (kăr'pâl) *n.* [L. *carpus* wrist.] A wrist bone. *a.* *Perit* wrist.

carpel (kăr'pêl) *n.* [Gk. *karpus* fruit.] A division of the seed vessel *simple* pistil. *Plu* Sporophylls which carry megasporangia megasporophylls.

carpocerit (kăr'pôserit) *n.* [L. *carpus* wrist Gk. *keros* horn.] Fifth antennal joint in certain Crustacea.

carpogenic (kár'pójén'ík) *n.* [Gk. *karpos* fruit *genesis* to produce.] Appl those cells in red algae which form the carpogonium *appl* cell oogonium of archicarp carpogonous.

carpogoni *m* (kár'pögóniüm) *n* [Gk. *karpos* fruit *gonos* birth.] Lower portion of procarp which contains female nucleus, in some thallophytes female gametangium in red algae.

carpollith (kár'pöüth) *n.* [Gk. *karpos* fruit *lithos* stone.] A small fruit

carpometacarpus (kár'pömëtäkkár'püs) *n.* [Gk. *karpos* wrist *metas* after.] Portion of wing skeleton formed by fusion of carpal and metacarpal bones, in birds.

carpophagous (kár'pöf'ägüs) *n.* [Gk. *karpos* fruit *phagos* to eat.] Feeding on fruit.

carphore (kár'pöfür) *n.* [Gk. *karpos* fruit *phoros* to bear.] Part of flower axis to which carpels are attached stalk of sporocarp.

carpophyt (kár'pöfit) *n.* [Gk. *karpos* fruit *phyton* plant.] A thallophyte which forms sporocarp.

carp podit (kár'pöpodit) *n* [L. *carpus* wrist Gk *podis* foot.] The third joint of endopodh certain Crustacea patella spiders

carposperm (kár'pöspër'm) *n* [Gk. *karpos* fruit *sperma* seed.] The fertilized oosphere in certain Thallophyta.

carposporangium (kár'pösporän'jüm) *n* [Gk. *karpos* fruit *spheros* seed *angrion* vessel.] The terminal cells & filaments developed from fertilized carpogonium some Thallophyta.

carpospore (kár'pöspö) *n* [Gk. *karpos* fruit *spheros* seed.] A spore of those formed at end of filaments developed from carpogonium.

carposporophyte (kár'pöspö röfür) *n.* [Gk. *karpos* fruit *spheros* seed *phyton* plant.] The diploid generation of red algae, which consists of filaments forming carpospores at their pices.

carpus (kár'pös) *n* [L. *carpus* wrist]

The wrist region of fore limb between forearm and metacarpus.

cartil ge (kár'tiléj) *n.* [L. *cartilago* cartilage.] Gristle a translucent, bluish-white tissue firm and elastic, found generally in connection with bones cartilaginous structure.

caruncle (kárü g'kl) *n.* [L. *caruncula*, small piece of flesh.] A naked, fleshy excrescence small conical body at inner junction of upper and lower eyelids caruncula lacrimalis a fleshy outgrowth on head of certain birds, and on certain caterpillars a little horny elevation at end of beak of embryo chicks piston like structure within acetabulum of dibranchiate Cephalopoda sucking-disc on tent of certain mites one of outgrowths from various regions of testa of seed a strophiole.

caryo-also karyo- *g*

caryolite (kár'liök) *n.* [Gk. *karyon*, nut *lytos* loosening.] A nucleated muscle fragment undergoing phagocytosis in development of insects.

caryopsis (kár'liöpsis) *n.* [Gk. *karyon* nut *opsis* appearance.] A superior one-celled one-seeded indehiscent fruit with a thin dry membranous pericarp inseparably united with the seed grain.

casein (käs'sein) *n.* [L. *caseus* cheese.] A phosphoprotein of milk, formed from caseinogen (casein U.S.A.) by action of rennet para casein (U.S.A.)

Casparian band [*R. Caspary* German botanist.] A cork or wood-like strip encircling radial walls of endodermis cells.

casqueous (käs'd'ëtis) *n.* [L. *casalis* helmet.] Helmet-like

caste (käst) *n.* [L. *castus* pure.] One of the distinct forms found among certain social insects.

castrate (käs'trát) *n.* [L. *castratus* to castrate.] *Perf* flowers from which androecium has been removed. *n.* An animal deprived of functional gonads, *♂* T deprived of testes *†* gonadectomy *†* inhibit development of gonads.

cata —also kata *qv*

catadromous (kátád ómós) *a.* [Gk. *kata*, down *drómōs* to run.] Tending downward having branches rising from lower side of pinnae in ferns having first set of nerves in a frond segment given off on basal side of midrib *appl.* fishes which migrate from fresh to salt water annually *pp* anadromous.

catalase,—an enzyme occurring in plant and animal tissues, which decomposes hydrogen peroxide into water and oxygen.

catalepsia (kátalēpsia) *n.* [Gk. *katalepsis* seizure.] A so-called shamming dead reflex, as in spiders of catalepsy.

catalysis (kátalēsis) *n.* [Gk. *katalysis* dissolving.] Acceleration or retardation of reaction due to presence of a catalyst.

catalyst (kátalēst) *n.* [Gk. *katalysis* dissolving.] An agent *eg* an enzyme, which can accelerate or retard, or initiate a reaction and apparently remains unchanged.

cataphoresis (kát'áforēsis) *n.* [Gk. *kataphoresis* to carry down.] Migration of particles in suspension as of living cells, under influence of electric current, the rate depending on voltage electrophoresis.

cataphyll (kát'áfil) *n.* [Gk. *kata* down; *phyllon* leaf.] Simple form of leaf on lower part of plant as cotyledon bud-scale, scale-leaf cataphyllary leaf *Opp* hypophyll.

cataphyllary (kát'áfil'ārī) *a.* [Gk. *kata*, down *phyllon* leaf.] *Appl.* rudimentary or scale-like leaves which act as covering of buds.

catapl wrist (kát'plōr'ŋ) *n.* [Gk. *kata*, down *pleura* side.] Thoracic pleuritis between anapleuritis and trochantin, as in certain Thysanura coxopleuritis.

catelectrotonus (kátēlēk'trōt'ónōs, kát'ēlēk'trōt'ónōs) *n.* [Gk. *kata* down *ēlēktron* amber; *tonos*, tension.] Increase in irritability of

nerve under influence of non polarizing electric current *q* katelectrotonus.

cat na (kátēnā) *n.* [L. *catena* chain.] A sequence of soil types which is repeated in a corresponding sequence of topographical sites, as between ridges and valleys of a region.

cat nation (kátēnāshōn) *n.* [L. *catenatus* chained.] End-to-end arrangement of chromosomes ring formation of alternating paternally and maternally derived chromosomes a chain as of diatom frustules.

cat noid (kátē'noid) *a.* [L. *catena*, chain Gk. *nōidos* form.] Chain-like; *appl.* certain protozoan colonies.

catenular (kátēn'ŭlār) catenulate (kátēn'ŭlāt) *a.* [L. *catena*, chain.] Chain-like *appl.* colonies of bacteria, colour markings on butterfly wings, shells, etc.

caterpillar (kát'ērplār) *n.* [L. *l. catus* cat L. *pelaeus* hairy.] Young worm-like insect larva, particularly of Lepidoptera eruca.

cathamnal (kát'hámāl) *a.* [Gk. *kathamnē*, anything tied.] *Appl.* plates forming endoderm lamella in some Coelenterata.

catkin (kát'kŭn) *n.* [A.S. *catel* little cat.] A spike with unisexual flowers and pendulous rachis; antherum.

cauda (kó dá) *n.* [L. *cauda*, tail.] A tail, or tail-like appendage posterior part of an organ *g* cauda equina, cauda epididymis a tube at posterior end of abdomen of certain insects, suggesting presence of further segment.

caudad (kó dád) *adv.* [L. *cauda*, tail *ad* toward.] Towards tail region or posterior end.

caudal (kó dāl) *a.* [L. *cauda* tail.] Of or *pert* tail *g* caudal fin.

caudat (kó dāt) *a.* [L. *cauda* tail.] Having tail *g* caudate nucleus *appl.* lobe of the liver.

ca datolenticular (kó dá'ŭlētēntik'ŭlār) *a.* [L. *cauda* tail *lens* lentil.] *Appl.* caudate and lenticular nuclei of corpus striatum.

caud x (kó dēks) *n* [*L. caudex* dry stump] The axis or stem of a woody plant as of tree-ferns, palms, etc.

caudicle (kó díkl) *n*. [*Dim* f *L. cauda* tail.] Stalk of pollinium in orchids.

caudihæmal (kó díhē mál) *n*. [*L. cauda* tail Gk. *haima*, blood.] *Appl* posterior lower portion of sclerotome.

caudineural (kó díno ū ál) *n*. [*L. cauda* tail Gk. *neuron* nerve.] *Appl* posterior upper portion of sclerotome.

caudostyle (kó dōstīl) *n*. [*L. cauda* tail Gk. *style* column] A terminal structure in certain parasitic amoebæ.

caul (kól) *n* [*N E. callo* cover] *g* An enclosing membrane minus omentum.

caulescent (kólsē sēnt) *n*. [*L. caulis* stalk.] With leaf bearing stem above ground.

caulicol (kólk bīks) *n*. [*L. caulis* stalk *colere* to inhabit.] *Appl* fungi growing on plant-stems.

cauliflory (kó'fīlō rī) *n* [*L. caulis* stalk *flor* flower] Condition of having flowers arising from axillary buds on main stem older branches cauliflorous habemus.

cauliform (kó'fīlōrm) *n*. [*L. caulis* stalk *forma* shape] Stem like

cauligen us (kó'fīl, enī) *n*. [Gk. *kaule* stem *genesis* birth] Borne on the stem

caulin (kó'fīn) [*L. caulis* stalk] *Part* stem *appl* leaves growing upper portion of stem *appl* vascular bundles not passing into leaves.

caulis (kó'fīs) *n*. [*L. caulis* stalk] The stem in herbaceous plants.

caulocalin (kó'fīkālēn) *n* [Gk. *kaule* stem *kalere* to summon.] A plant hormone possibly laborated roots which stimulates growth of stem.

caulocarpou (kó'fīkār'pōs) *n*. [Gk. *kaules* stem *karpos* fruit.] With fruit-bearing stem

caulocystidi m: kó'fīkōstīdīōm) *n*

[Gk. *kaules* stalk *kystis* bag *diare diare*] One of the cystidium-like structures on stipe of certain Basidiomycetes.

caulome (kó'fōm) *n* [Gk. *kaule* stem.] The stem structure of a plant as whole.

cavernosus (kāv'ērōs'ūs) *n* [*L. cavernosus* chambered] Full of cavities hollow or resembling a hollow *appl* tissue nerve, arteries.

cavicorn (kāv'īkōrn) *n*. [*L. cavaus* hollow *cornu* horn.] Hollow horned *appl* certain ruminants.

cavum (kāv'ūm) *n*. [*L. cavaus* hollow] The lower division of concha caused by origin of helix cavity of mouth larynx long bones, etc. any hollow or chamber

cecal,—caecal *g.s*

cæcum,—cæcum, *g.s*

cellac,—coehac, *g.s*

cell (sēl) *n* [*L. cella* compartment.] A small cavity or hollow a loculus unit mass of protoplasm usually containing a nucleus or nuclear material originally the cell wall space between veins of insect wings

celligal (sēlīfīgāl) *n*. [*L. cella*, cell *fugere* to flee] Moving away from a cell

cellipetal (sēlīpētāl) [*L. cella* cell *petere* to seek] Moving towards a cell

cell lineage,—the derivation of a tissue or part from a definite blastomere of embryo.

cell organ,—a part of cell having a special function, as centrosome organel.

cell pl to,—equatorial thickening of spindle fibres from which partition wall arises & ring division of plant cells

cell sap—the more fluid ground substance of the cell.

cellular (sē'lūlār) *n* [*L. cellula* small cell] *Part* or consisting of cells.

cellulase (sē'lōl) *n* [*L. cellula* small cell.] An enzyme which hydrolyses cellulose occurring in bacteria and fungi.

cellulin (sɛl'ŭlɪn) *n* [*L. cellula* little cell.] A carbohydrate found in constructions of hyphae.

cellulose (sɛl'ŭləs) *n* [*L. cellula* small cell.] A carbohydrate forming main part of plant cell walls, also found in tests of tunicates ( $C_6H_{10}O_5$ ).

cell wall,—investing portion of cell  
calo—coco—*g.s*

cement (sɛmɛnt) *n* [*L. cementum* mortar] A substance chemically and physically allied to bone investing parts of teeth crusta petrosa a uniting substance secreted by certain animals.

cenchrus (sɛŋ'krʊs) *n*. [*Gk. ἀνγκύρος* millet.] A pale-coloured area on mesothorax of saw-flies

ceno—*see* caruo—coruo—  
nser mechanism,—method of seed distribution by which seeds are jerked out from fruit by high wind.

centradenia (sɛn'trædɛniə) *n*. [*Gk. κέντρον* centre *αδέν* gland.] The type of siphonophore colony in *Diactinotia*.

central (sɛn'trəl) *a*. [*L. centrum* centre.] Situated in the centre *vertebr.* a vertebral centrum. *n*. A bone in wrist or ankle, situated between proximal and distal rows.

central body—centrosome *g.s*

central cylinder—stele *g.s*

centric (sɛn'trɪk) *a*. [*L. centrum* centre.] *Appl.* leaves, which are cylindrical or terete : having centromere.

c. trifugal (sɛn'trɪf'ʊɡəl) *a*. [*L. centrum*, centre *fugere*, to flee] *Appl.* compact cymose inflorescences having youngest flowers towards outside *appl.* nerves transmitting impressions from nerve centre to parts supplied by nerve.

centriol (sɛn'trɪəl) *n*. [*L. centrum* centre.] The central part of the centrosome the centrosome itself

centripetal (sɛn'trɪp'etəl) *a*. [*L. centrum* centre *petere* to seek.] *Appl.* racemose inflorescences having youngest flowers at per *appl.* nerves transmitting impres-

sions from peripheral : xeremities to nerve centres.

centripetal canals,—blind canals growing from circular canal backwards towards apex of bell in certain Trachomedusae.

centro-acina (sɛn'trōds'ɪnər) [*L. centrum* centre; *acinus* berry] *Part* centre of an alveolus, as in pancreas.

centrodesmos (sɛn'trōds'mōs) centrodesm *s* (sɛn'trōds'mōs) *n*. [*Gk. κέντρον* centre *δεσμός* bond.] The fibril or system of fibrils temporarily connecting two centrosomes also centrodesm.

centrodorsal (sɛn'trōdɔr'səl) *a*. [*L. centrum* centre *dorsum* back.] *Appl.* plate in middle of aboral surface of unstalked crinoids.

c. trigenous (sɛn'trɔj'ɛnɪs) *a*. [*Gk. κέντρον* centre *γενεῖν* to produce.] *Appl.* a skeleton of spicules which meet in common centre and grow outwards.

centrolecithal (sɛn'trōlɛk'ɪθəl) *a*. [*Gk. κέντρον* centre *lecithos* yolk.] With yolk aggregated in the centre, *appl.* ovum.

centromere (sɛn'trōmɛr) *n*. [*Gk. κέντρον* centre *μερῶς* part.] The part of the chromosome located at the point lying on the equator of the spindle at metaphase and dividing at anaphase, controlling chromosome activity pindle attachment region, achromate kinetochore.

centron (sɛn'trɔn) *n*. [*Gk. κέντρον* centre.] Cyton, *g.s*

centrophorium (sɛn'trōfɔr'mɪəm) *n*. [*Gk. κέντρον* centre *φύρον* small basket.] The Golgi-bodies when in round basket like form.

centroplasm (sɛn'trɔpləzm) *n*. [*Gk. κέντρον* centre *πλάσμα* mould] Substance of centrosphere more or less definite concentric zone round the aster in mitosis.

centroplast (sɛn'trɔpləst) *n*. [*Gk. κέντρον*, centre; *πλαστικός* formed.] An extranuclear spherical body forming division centre of mitosis in certain lower organisms.

centrosome (sɛn'trɔ:sm) *n* [Gk. *kentron*, centre *soma* body] A cell-organ the centre of dynamic activity: mitosis, consisting of centriole and attraction-sphere.

centrosphere (sɛn'trɔ:sf) *n* [Gk. *kentron* centre *sphaera*, ball.] The central mass of aster and centrosome astrosphere attraction-sphere.

centrotaxis (sɛn'trɔ:tɪks) *n* [Gk. *kentron* centro *taxis* arrangement.] Orientation of chromatin thread towards cytocentrum during leptoten stage.

centrotheca (sɛn'trɔ:θɛ'kɪ) *n* [Gk. *kentron* centre *thake* case.] Ichosone *g.s*

centrum (sɛn'trʊm) *n* [L. *centrum* centre.] The main body of vertebra from which neural and haemal arches arise centrosome, centrosphere *g.s*

cephal —also kephal

cephalad (kɛf'æləd, sɛf) *adv* [Gk. *kephal* head L. *ad* towards.] Towards head region or anterior end

cephalanthium (kɛf'ælən'θiʊm, sɛf) *n* [Gk. *kephale* head *anthon* flower] The capitulum in composite plants anthodium

cephaletron (kɛf'ælɪ'trɔ:n, sɛf) *n* [Gk. *kephale* head *strom* belly] The anterior region of Xiphosura

cephall (kɛf'ælɪk, sɛf) *n* [Gk. *kephale* head] Part head in head region.

cephalic ind *n*, —one hundred times maximum breadth divided by maximum length of skull.

cephalin (kɛf'ælɪn, sɛf) *n* [Gk. *kephale* head] A phospholipide present in nerve fibres and egg yolk kephalin an epimerite bearing trophozoites.

phallis (kɛf'ælɪs, sɛf) *n* [Gk. *kephali* little bulb] The uppermost chamber of monaxonic shells of Rad clams.

cephalisation (kɛf'ælɪzə'shun sɛf) *n* [Gk. *kephale* head.] Increasing differentiation and importance

of anterior end in animal development.

cephalon (kɛf'ælɔ:n, sɛf) *n* [Gk. *kephale* head.] The head of arthropods head shield of trilobites.

cephal nt (kɛf'ælɔ:nt, sɛf) *n* [Gk. *kephale* head.] A porozoan about to proceed to spore-formation.

cephal pod (kɛf'ælɔ:pɔd, sɛf) *n* [Gk. *kephale* head *pod* foot.] Marine mollusc with muscular sucker bearing arms on head region e.g. cuttle-fish, octopus.

cephalopodium (kɛf'ælɔ:pɔ'diʊm sɛf) *n* [Gk. *kephale* head *pod* foot.] The head and arms constituting the head-region in cephalopods.

cephalopsin (kɛf'ælɔ:p sɪn sɛf) [Gk. *kephale* head *opsis* sight.] A photopigment resembling visual purple in eyes of cephalopods and some other invertebrates.

cephalostegite (kɛf'ælɔ:stɛ'ʃɪt, sɛf) *n* [Gk. *kephale* head *stegē* roof] Anterior part of cephalothoracic shield.

cephalostyle (kɛf'ælɔ:stɪl sɛf) *n* [Gk. *kephale* head *stylas* pillar] Anterior end of notochord enclosed sheath | Chondrocrania.

cephalotheca (kɛf'ælɔ:θɛ'kɪ sɛf) *n* [Gk. *kephale* head *thekē* case] Head integument in insect pupa.

cephalothorax (kɛf'ælɔ:θɔ'ræks, sɛf) *n* [Gk. *kephale* head *thorax* breast.] The body region formed by fusion of head and thorax | Arachnida and Crustacea.

cephalotrocha (kɛf'ælɔ:t'rɔ:kə, sɛf) *n* [Gk. *kephal* head *trochos* wheel.] A turbellarian larva with eight processes round mouth.

cephalula (kɛf'æl'ɔ:lə, sɛf) *n* [Gk. *kephale* head.] Free-swimming embryonic stage in certain brachiopods.

cer —also ker

cerata (sɛr'ætə, kɛr) *n plu* [Gk. *keras* horn.] Lobes or leaf-like processes acting as gills on back of nudibranch molluscs.

cerati m (sɛr'ætɪz) *n* [Gk. *keras* little horn] A seta without the repl m

ceratobranchial (kér'átbrāng'kiāl sēr). [Gk. *keras* horn *branchia*, gills.] An element of branchial arch

cerat byal (kér'átóh'fāl sēr) = [Gk. *keras* horn; *kyeidos* T-shaped.] The component of hyoid arch next below epiphyal.

ceratotrichia (kér'átótrik'hia sēr) = *trichia* [Gk. *keras* horn *trichis* hair] Horny and non-cellular actinotrichia of elasmobranchia.

cercal (sér'kāl) = [Gk. *kerkos* tail.] *Peri* the tail *peri* cerci, *apud* hairs, nerve

cercaria (sér'káriá) = [Gk. *kerkos* tail.] A heart-shaped trematode larva with tail.

cercel — *part* of cercus.

cercoid (sér'sid) = [Gk. *kerkis* shuttle.] One of minute wandering cells produced by division of archaeocytes in certain sponges.

cercoid (sér'koid) = [Gk. *kerkos* tail *eidos* shape.] One of paired appendages on mouth, or teeth, buccal segment of certain insect larvae

cercus (sér'kús) [Gk. *kerkos* tail.] A jointed appendage at end of abdomen in many arthropod appendage bearing acoustic hairs in some insects.

ce (sér) = [L. *cera* wax.] A swollen fleshy patch at proximal end of bill in birds.

cerebellar (sér'ebel'ár) = [L. *cerebrum* brain.] *Peri* the cerebellum or hind-brain.

cerebellum (sér'ebel'úm) = [L. *cerebrum*, brain.] The fourth division of brain arising from differentiation of anterior part of third primary vesicle.

cerebral (sér'ebrál) [L. *cerebrum* brain.] *Peri* the brain *peri* anterior part of brain or cerebral hemisphere.

cerebral organs, — chemical sense organs, paired ciliated tubes associated with dorsal ganglion and opening to exterior in nemertines.

cerebrif gal (sér'ebri'f'gál) = [L. *cerebrum* brain *fugere* to flee.]

*Apud* nerve fibres which pass from brain to spinal cord.

cer broganglion (sér'ebrogāng'glion) = [L. *cerebrum* brain Gk. *ganglion*, swelling] The supra-oesophageal ganglia of invertebrates.

cerebropedal (sér'ebropéd'ál) = [L. *cerebrum* brain *per* foot.] *Apud* nerve strands connecting cerebral and pedal ganglia in molluscs.

cerebrospinal (sér'ebropé'sp'ál) = [L. *cerebrum* brain *spinal* spine.] *Peri* brain and spinal cord.

cerebrovisceral (sér'ebrovís'érál) = [L. *cerebrum* brain *viscus* viscera.] *Apud* connective joining cerebral and visceral ganglia in molluscs.

cerebrum (sér'ebrium) = [L. *cerebrum* brain.] The fore-brain arising from differentiation of first primary vesicle.

cereous (sér'etús) = [L. *cera* waxen.] Wax-like.

ceriferous (sér'if'etús) = [L. *cera* wax *ferre* to carry.] Wax producing *apud* organs.

cernuous (sér'nús) = [L. *cernere* with face turned downwards.] Drooping pendulous.

ceroma (sér'ómá) = [Gk. *kerasma* ointment] The cere of birds.

eros (sér'ús) = [L. *cera* wax.] *Apud* structure resembling cere

certation (sér'táshún) = [L. *certare* contest.] Competition in growth rate of pollen tubes of genetically different types

arumen (sér'túmen) = [L. *cera* wax.] Wax-like secretion from ceruminous glands of ear wax secreted by scale insects wax of nest of certain bees.

cervical (sér'vikál, sér'v'kál) = [L. *cervix* neck.] *Apud* or *peri* structures connected with neck, as nerves, bones blood-vessels, also to cervix or neck of an organ.

cervicum (sér'vikúm) = [L. *cervix* neck.] The neck-region of Arthropoda.

cervix (sér'vix) = [L. *cervix* neck.] The neck or narrow mouth of an organ, as cervix uteri.



oesoph. se —oesoph.ose, *g* =

cetolith (sē'tōlith) *n* [Gk. *Arctos* whale *lithos* stone] The fused tympanic and petrosal of whales, found in deep-sea dredging

■ vitamic acid, —ascorbic acid or vitamin C

chaeta (kē'tā) *n* [Gk. *chaite* hair] A seta (*g*, *u*) or bristle, as f certain worms.

chaetic (kē'tik) *a*. [Gk. *chaite* hair] Bristle-like *appl* type of tactile sensilla in insects.

chaetiferous (kē'tif'ērūs) *a* [Gk. *chaite* hair *L. ferre* to bear] Bristle bearing chaetigerous, setigerous.

chaetophorous (kē'tōf'ōrūs) *a*. [Gk. *chaite* hair *phorin* to bear] Bristle bearing *appl* worms and certain insects.

chaetosoma (kē'tōsōmā) *n*. [Gk. *chaite* hair *soma*, sign.] One of two small sensory organs located on head of certain Lepidoptera, and provided with bristles and sensory cells connected by sheathed nerve to brain; Jordan's organ

chaetotaxy (kē'tōtāk'sī) *n*. [Gk. *chaite* hair *taxis* arrangement] Bristle pattern r arrangement.

chain behavior —a series of actions each being induced by the antecedent action and being an integral part of unified performance

chalara (kāl'ārā) *n*. [Gk. *chalaze* bail] One of two spiral bands attaching yolk to membrane of a bird's egg base f uellus f ovule, from which integuments arise.

chalaziferous (kāl'azif'ērūs) *a* [Gk. *chalaze* bail *L. ferre* to bear] *Appl* layer of albumen surrounding yolk and continuous with chalazae.

chalazogamy (kāl'azōg'āms) *n*. [Gk. *chalaze* bail *gamos* marriage.] Fertilisation in which the pollen-tube pierces chalazae of ovule f porogamy

chalice (chāl'is) *n*. [L. *calix* goblet] *Appl* simple gland cells or goblet cells a modified columna epathe-

lial gland cell arms and disc of crinoid.

chalones (kāl'ōns) *n*, *pl* [Gk. *chali* mas curb] Internal secretions which depress activity *appl* hormones.

chalone (kāl'ōn) *a*. [Gk. *chalones* curb] Depressor inhibitory or restraining *appl* internal secretions *appl* hormonal.

chama phyte (kām'ifit) *n*. [Gk. *chamos* on the ground *phyton* plant.] A plant with shoots that bear dormant buds lying on or near the ground.

chasmatoplasm (kās mātōplāsm) *n* [Gk. *chasma*, expanse *plasma* mould.] An expanded form of plasmon.

chasmoch mophyte (kās'mōkō mōfit) *n*. [Gk. *chasma*, opening *hama*, mound *phyton* plant.] A plant growing on detritus in rock crevices.

chasmogamy (kāsmōg'āms) *n*. [Gk. *chasma*, opening *gamos* marriage.] Opening of mature flower to ensure fertilisation *appl* cleistogamy

chasmophyte (kās'mōfit) *n* [Gk. *chasma* opening *phyton* plant.] A plant which grows in crevices f rocks chasmophilous plant

ch ek (chēk) *n*. [A.S. *checc* cheek.] The fleshy wall of mouth in mammals side of face in invertebrates the lateral portions of head as fixed and free cheeks f trilobes.

chilocystidium (k'iloistid'ium) [Gk. *chilos* edge *kystis* bag *idion* dim.] A cystidium in hymenium at edge of lamella cf pleurocystidium

chelopterygium (kīroptēr'ijūm) *n* [Gk. *chela* hand *pteryx* wing] The pentadactyl limb typical of higher vertebrates.

chela (kē'lā) *n* [Gk. *chela* claw] The claw borne on certain limbs of Crustacea and Arachnoidea a short sponge spicule with talon-like projections at one or each end.

chelate (kē'lāt) *a*. [Gk. *chela* claw] Claw-like or pincer-like chelate form cheliferous, *g*, *u*

chelicera (kēlīs ērē) *plu.* [Gk. *chele* claw *heros* horn.] Anterior chelat or sub-chelate ppendages of Arachnoides also cheliceræ.

chelliferous (kēlī'fērōs) *a.* [Gk. *chele* claw *L. ferre* to bear] Supplied with chelæ or claws.

chelliform (kēlī'fōrm) *a.* [Gk. *chele* claw *L. forma* shape] Claw-like *appl* appendages.

chelliped (kēlī'pēd) *n.* [Gk. *chele* claw *L. pes* foot.] A claw bearing ppendage; forceps of decapod crustaceans.

cheliphores (kēlī'fōrē) *n. plu.* [Gk. *chele* claw *pheros*, to bear] First pair of appendages in Pycnogonida.

chemiluminescence (kēm'illūmīnēs ēns, lōo-) [Gk. *chemia*, transmutation *L. luminescere* to grow light.] Light production at ordinary temperature during chemical reaction, as bioluminescence *q.v.*

chemonasty (kēm'ōnēs'tī) *n.* [Gk. *chemia* transmutation *nastes* close pressed] Response to diffuse or indirect chemical stimuli.

chemoreceptor (kēm'ōrēp'tōr) [Gk. *chemia*, transmutation *L. recipere* to receive] A terminal organ receiving chemical stimuli.

chemoreflex (kēm'ōrē'fleks) *n.* [Gk. *chemia* transmutation *L. flectere* to bend back.] A reflex caused by chemical stimulus.

chemosynthesis (kēm'ōsīn'thēsis) *n.* [Gk. *chemia* transmutation *syn* with *titheos* to place] The building up of chemical compounds in organisms.

chemotaxis (kēm'ōtāk'sīs) *n.* [Gk. *chemia* transmutation *taxis* arrangement.] The reaction of cells or freely motile organisms to chemical stimuli also chemiotaxis.

chemotrophic (kēm'ōtrō'fik) *a.* [Gk. *chemia*, transmutation *trophie* nourishment] Deriving nourishment from certain inorganic substances, *appl* certain organisms without chlorophyll, as from bacteria and sulphur bacteria.

chemotropism (kēm'ōtrō'pizm) *n.* [Gk. *chemia* transmutation *tropē* turn.] Curvature of a plant or plant organ in response to chemical stimuli.

chernoz m (chēr'nōzēm, chēr'nōyōm) *n.* [Russ. *chernyi* black; *zemlya*, soil.] Black soil, characteristic of steppe and grass land and formed under continental climatic conditions blackearth.

choreophyt (kēr'sōfē) *n.* [Gk. *chōros* waste places *phytos* plant.] A plant which grows on waste land.

ch strat soil ~dark-brown soils of semi-arid steppe-lands fertile under adequate rainfall or when irrigated

ch ta,—chaeta, *q.v.*

chevron (shēv'rōn) *a.* [F *heron* after from *L. caper* goat.] *Appl* V-shaped bones articulating with ventral surface of spinal column in caudal region of many vertebrae.

chiasma (kiās'mā) *n.*, chiasmata (kiās'mātā) *plu.* [Gk. *chiasma*, cross.] A decussation of fibres as optic chiasma in paired chromatids, an exchange of partners in meiosis.

chiasmotypy (kiās'mīt'pē) *n.* [Gk. *chiasma* cross *typos* character] A form of recombination of chromosome material in synapsis chiasmotype *appl* theory that chiasmata and crossing-over are causally correlated.

chlaestic (kiās'tik) *a.* [Gk. *chlaestō* diagonally arranged.] Decussating crossing obliquely or at right angles to axis *part* chiasmata.

chlaestoneural (kiās'tōnē'ral) *n.* [Gk. *chlaestō* diagonally arranged; *neurōn* nerve.] *Appl* certain gastropods in which visceral nerve cords cross and form figure 8.

chillaria (kiā'riā) *n. plu.* [Gk. *cheilos* lip.] Pa of processes between sixth pair of ppendages in Limulus.

chilidi m (kiā'dī'm) *n.* [Gk. *cheilos* lip *idion* own.] A belly plate covering deltoidal fissure in dorsal abd. of certain Brachlopoda.

chimaera (līmē rā) *n* [L. *chimaera* monster] A single organism developing from two fused rudiments from different individuals, or composed of tissues of two different genotypes a mosaic.

chimonophilous (kīmōnōf'īlūs) *a*. [Gk. *chimon* winter *philein* to love.] Thriving = growing during winter

chiropterophilous (kīrōp'tērōf'īlūs) *a*. [Gk. *chiro* hand *pteron* wing *philo* loving] Pollinated by agency of bats.

chitin (k'itin) *n* [Gk. *chiton* tunic.] A nitrogenous carbohydrate derivative forming the skeletal substance in arthropods, also occurring in fungi.

chitinase (k'itīnās) *n* [Gk. *chiton* tunic.] An enzyme which hydrolyses chitin, in mould fungi and in digestive juice of snail.

chlamydate (klām'dat) *a*. [Gk. *chlamys*, cloak.] Supplied with mantle.

chlamydeous (klāmīd ēūs) *a*. [Gk. *chlamys* cloak.] Part flower and envelope.

chlamydespore (klām'īdōspō) *n* [Gk. *chlamys* cloak *spora* seed.] A thick-walled resting pore of certain fungi and protozoa.

chloragen (klō rājēn) *a*. [Gk. *chloros* sandy yellow *gennos* descent.] *Appl* yellow cells found in connection with alimentary canal of annelids also chloragogen

chloragocyte (klō'rāgōsīt) *n* [Gk. *chloros* sandy yellow *kytos* hollow] A chloragogen cell.

chloragoge — chloragen *q.v.*

chloragosomes (klō rāgōsōms) *n* *plu* [Gk. *chloros* sandy yellow *soma* body] Yellow or brownish globules formed in chloragogen cells.

chloeranthy (klōrān'thī, klō rānthī) *n*. [Gk. *chloros* grass green *anthos* flower] Reversion of floral leaves back to ordinary green leaves.

chlorenchyma (klōrēng'kīmā) *n* [Gk. *chloros* grass green *enchyma* infusion] Tissues collectively or stem tissue or mesophyll containing chlorophyll

chlorocruorin (klō rokroo'dētn) *n* [Gk. *chloros* grass green L. *cruor* blood.] A green respiratory pigment occurring in blood plasma of certain worms.

chlorofucin (klōrbfū'sh) *n*. [Gk. *chloros* green L. *fucus* seaweed.] Chlorophyll *c* in diatoms and brown algae chlorophyll *γ*

chlorophane (klō'rōfān) *n* [Gk. *chloros* grass green; *phainomai* to appear] A green chromophane

chlorophore (klō'rōfō) *n* [Gk. *chloros* grass green *phoros*, carrying] A chlorophyll granule in Protista.

chlorophyll (klō'rōfīl) *n* [Gk. *chloros* grass green *phyllon* leaf.] The green colouring matter found in plants and in some animals chlorophyll *a*,  $C_{55}H_{72}O_5N$  M<sub>g</sub>  $\delta$   $C_{55}H_{70}O_5N$  M<sub>g</sub> *c* or  $\gamma$  or chlorofucin, *q.v.* formerly *apophyll* mixture of chlorophyll *a* and pheophytin *a*.

chloroplast (klō'rōplāst) chloroplastid (klō'rōplā'stīd) *n* [Gk. *chloros* grass green *phlotes* moulded.] A minute granule or plastid containing chlorophylls *a* and  $\delta$  found in plant-cells exposed to light.

chloroplast pigments, — chlorophylls, carotene, and xanthophyll. chlorosis (klōrō'sis) *n* [Gk. *chloros* pallid.] Abnormal condition characterised by absence of green pigments in plants, owing to lack of light, or to magnesium- or iron-deficiency green-sickness in humans.

chlorostolith (klō'rōstār'ōlīth) *n*. [Gk. *chloros* grass green *stathos* stationary *lithos* stone.] A chloroplast which moves under the influence of gravity in a statocyst of statolith arnylostolith.

chlorotic (klōrō'tīk) *a* [Gk. *chloros* pallid.] Part or affected by chlorosis.

choana (kō ānā) *n* [Gk. *chanos* funnel.] A funnel-shaped opening posterior nares.

choanocyte (kō'ānōēt) *n.* [Gk. *choane* funnel *kytos* hollow] A cell with funnel-shaped rim or collar round the base of flagellum.

choanoid (kō'ānōid) *n.* [Gk. *choane* funnel *eidos* like.] Funnel-shaped *appl.* eye muscle, retracto bulbi, absent in snakes, birds, and higher primates.

choanosome (kō'ānōsōm) *n.* [Gk. *choane*, funnel *sōma*, body] I sponges, the inner layer with flagellate cells.

cholecyst kina (kō'ētsō'ōkīn) *n.* [Gk. *chole* bile; *kystis* bladder *kinein* to move.] A duodenal hormone which induces contraction of gall-bladder and relaxation of Oddi's sphincter.

choledoch (kō'ēdōk) *n.* [Gk. *chole* bile *dochos* containing] *Appl.* common bile duct.

cholei (kō'ē'ik) [Gk. *chole* bile] *Part.* acid contained in ox bile.

cholesterol (kolē'stērōl) *n.* [Gk. *chole* bile *steros*, solid.] Cholesterol white fatty alcohol found in protoplasm, nerve tissue, bile, yolk, and other animal substances  $C_{27}H_{46}O$ .

choline (kō'īn, -ēn) *n.* [Gk. *chole* bile.] A crystalline base found in plants and animals, decomposition product of lecithin  $C_5H_{13}O_2N$ .

cholinergic (kōlīnēr'jik) *n.* [Gk. *chole*, bile; *ergon* work.] *Appl.* parasympathetic nerve fibres which liberate acetyl-choline from their terminations; *cf.* adrenergic.

cholochrom (kōl'ōkrōm) *n.* [Gk. *chole* bile *chroma*, colour] A bile pigment biliphaein.

cholohe matin (kō'ohē mātīn) *n.* [Gk. *chole* bile *haima*, blood] Phylloerythrin; cholehaematin.

chom phyte (kō mō'fik) *n.* [Gk. *chama*, mound *phyton*, plant.] A plant growing in detritus on rocks.

chondral (kōn drāl) *n.* [Gk. *chondros* cartilage.] *Part.* cartilage.

chondrioceti *n.* (kōn drīōkē'ashn) *n.* [Gk. *chondros* cartilage *L. facere*

to make.] Conversion into cartilage.

chondrig *n.* (kōn drī'ēn) *n.* [Gk. *chondros* cartilage *genesis* to produce.] The base matrix of all cartilaginous substance, a collagen.

chondrin (kōn drīn) *n.* [Gk. *chondros* cartilage.] A gelatinous substance obtained from cartilage.

chondriocent (kōn drīōkōnt) *n.* [Gk. *chondros* grain *kenter* pole.] A rod-like or fibrillar type of chondriosome.

chondriodieresis (kōn drīōdēr'ēsis) *n.* [Gk. *chondros* grain *dieresis* to swing about.] Changes in mitochondria during cell division.

chondriokinesis (kōn drīōkīn'ēsis) *n.* [Gk. *chondros* grain *kinesis* movement.] Division of chondriosomes in mitosis and meiosis.

chondri ma (kōndrīō mā) *n.* [Gk. *chondros* grain.] The chondriosome content of cell chondrioma.

chondri mere (kōn drīōmēr) *n.* [Gk. *chondros* grain *meros* part.] Plastomere, *q.v.* cytomere *q.v.*

chondriomite (kōn drīōmīt) *n.* [Gk. *chondros* grain *mitos* thread.] A linear type of chondriosome.

chondrioplast (kōn drīōplāst) *n.* [Gk. *chondros* grain *plastos*, formed.] A rod-like formation of reticular material; Golgi rod.

chondriosomes (kōn drīōsōms) *n. pl.* [Gk. *chondros* grain *sōma*, body] Mitochondria, *q.v.* numerous synonyms *cf.* chondriomites, chondriocents, chondriospheres, chondrioplasts.

ch drisophere (kōn drīōsēr) *n.* [Gk. *chondros* grain *sphaira*, globe.] A spherical type of chondriosome mitochondria which have coalesced.

chondroblast (kō drōblāst) *n.* [Gk. *chondros* cartilage *blastos* bud.] A cartilage producing cell.

chondroclast (kōn drōklāst) *n.* [Gk. *chondros* cartilage *klastos* broken down.] A large multinucleate cell which destroys cartilage matrix also chondroclast.

chondrocranium (kôn drôkrâ nîlûm) *n*. [Gk. *chondros* cartilago *kranium*, skull.] The skull when in cartilaginous condition either temporarily as in embryos permanently as in some fishes.

chondrocyte (kôn drôst) *n*. [Gk. *chondros* cartilage *hyles* hollow] A cartilage cell.

chondrogenesis (kôn drôpên êsis) *n*. [Gk. *chondros* cartilage *genesis* descent.] The production or formation of cartilage.

chondroid (kôn droïd) *a*. [Gk. *chondros* cartilage *eides* shape.] Cartilage-like *appl* tissue, undeveloped cartilage or pseudo-cartilage serving as support in certain invertebrates and lower vertebrates *appl* vascular supporting tissue (notochord fibrohyaline).

chondromucoid (kôn drômû'koid) *n*. [Gk. *chondros* cartilage *L. mucus* mucus Gk. *eides* form.] A basophil protein which with collagen forms ground-substance of cartilage chondroecrin.

chondrophore (kôn drofôr) *n*. [Gk. *chondros* cartilage *pherein* to bear] A structure which supports the inner hinge cartilage in a bivalve shell.

cho driskeleton (kôn drôskêl êtôn) *n*. [Gk. *chondros* cartilage *skelêton* dried body] A cartilaginous skeleton.

chondrosteous - (kôn drôstêus) *a*. [Gk. *chondros* cartilage *osteos* bone.] Having a cartilaginous skeleton.

chondrosternal (kôn drôstêr'nâl) *a*. [Gk. *chondros* cartilage *sternon* breast.] *Part*. rib cartilages and sternum.

chon (kô nê) *n*. [Gk. *chone* funnel.] A passage through cortex of sponges, with one or more external openings, and one internal opening.

chorda (kôr'dâ) *n*. [Gk. *chorde* string] The notochord in plural tendinous cords attached to valves of heart any cord lik structure.

chordacentra (kôr'dâsên'trâ) *n pl*. [Gk. *chorde* string *L. centrum* centre.] Centra formed by conversion of chordal sheath into a number of rings of arch-centra.

chordate (kôr'dât) *a*. [Gk. *chorde* string] Having a notochord.

chordotonal (kôr'dôtônâl) *a*. [Gk. *chorde* string *tonos* tone.] *Appl* rod-like or bristle-like receptors for mechanical and sound vibrations, in various parts of body of insects.

chose (kô rê) *n*. [Gk. *chore* place.] An area manifesting a unity of geographical or environmental conditions of biotope, biotope.

choralathetose (kôr'âlêth êtôs) *a*. [Gk. *choria*, dance; *athetosis* law less.] Arhythmic and uncoordinated *appl* foetal movements.

choriocapillaris (kôr'kôkâpû'ârê -kôp'îlâ ris) *n*. [Gk. *chorion* skin *L. capillaris* capillary] The innermost vascular layer of choroid.

chorioid, — choroid, *q.v*

chorion (kô rîôn) *n*. [Gk. *chorion* skin.] An embryonic membrane external to and enclosing the amnion allantochoion *q* hardened shell covering egg of insects outer membrane of seed.

chorion frondosum, — villous placental part of chorion.

chorion laeve — smooth non-placental part of chorion.

chorionic (kôr'îôn'îk) *a*. [Gk. *chorion* skin.] *Part* the chorion *appl* gonadotrophic hormone or prolan.

choriorretinal (kôr'îôrê'tînâl) *a*. [Gk. *chorion* skin *L. retina* retina] *Part*. choroid and retina.

choripetalous (kô rîpê'tâlôs) *a*. [Gk. *choris* separate *petalon* leaf.] Having separate petals.

choriphyllous (kô rîfû'lôs) *a*. [Gk. *choris* separate *phylon* leaf.] Having perianth parts distinct.

chorisepal (kô rîshêp'âlôs) *a*. [Gk. *choris* separate *F. sepal* sepal.] Having the sepals apart.

chorial (kō'riā) *n.* [Gk. *choris* separate.] Increase in parts of foetal whorl due to division of its primary members deduplication.

choroid (kō'roid) *a.* [Gk. *chorion* skin *oides* form.] *Appl.* delicate and highly vascular membranes. *n.* Layer of eye between retina and sclera.

choroidal (kō'roid'al) *a.* [Gk. *chorion* skin *oides* form.] *Part.* choroid.

chorology (kō'rō'lōjī) *n.* [Gk. *choros* place *logos* discourse.] Biogeography geographical distribution biotopography science of the distribution of organisms of organs.

choron mic (kō'rōn'mīk) *a.* [Gk. *choros*, place *nomos* law] External *appl.* influences of geographical or regional environment. *appl.* autonomic.

chorotypes (kō'rōtips) *n. plu.* [Gk. *choros* place *types* pattern.] Local types.

chreard (krē'ard) *n.* [Gk. *chreos* use *ardos* I water] Soil water available for plant growth of orchard holard.

chr maffin (krō'māfin) *a.* [Gk. *chroma*, colour *L. affinis* related.] Chromaphil.

chromaphil (krō'māfil) *a.* [Gk. *chroma* colour *philos* to love] Stained by chromic acid or its salts when adrenaline is present *appl.* cells forming medullary parts of suprarenal bodies *appl.* bodies or paraganglia chromophill, chromatin.

chr maph be (krō'māfīb) *a.* [Gk. *chroma*, colour *phobos* fear] *Appl.* non-stainable cells or tissues chromophobe.

chr masi (krō'māsi) *n.* [Gk. *chroma*, colour] Increase of chromatin in nucleus and formation of nucleolus of achromasie.

chromatic (krō'nāt'ik) *a.* [Gk. *chroma* colour] Colourable by means of staining reagents *part.* colour having chromatophores.

chr matic sphaera,—the sphere formed by coalescence of chromosomes after anaphase in mitosis.

chromatic threshold—the minimal stimulus, varying with the length of light, which induces a colour sensation.

chromaticity (krō'nāt'itē) *n.* [Gk. *chroma* colour] Unlikeness to grey or saturation of a colour.

chr matid (krō'mātid) *n.* [Gk. *chroma* colour] A component of tetrad in meiosis; a half chromosome between early prophase and metaphase in mitosis, or between diplotene and second metaphase in meiosis.

chromatin (krō'mātin) *n.* [Gk. *chroma*, colour] A substance in the nucleus which contains nucleic acid proteids, and stains with basic dyes.

chromatogen organ,—a brownish lobed body the axial organ of certain echinoderms.

chromatoid grains,—grains in cell-protoplasm, which stain similarly to chromatin.

chromatolysis (krō'mātol'isis) *n.* [Gk. *chroma*, colour *lysis* loosing] Disintegration of Nissl granules, as in fatigued nerve-cells tigrolysis.

chromatophil (krō'mātofil) *a.* [Gk. *chroma*, colour *phileos* to love.] Staining easily.

chromatophore (krō'mātofor) *n.* [Gk. *chroma*, colour *phoros*, to bear] A coloured plastid of plants and animals a colourless body in cytoplasm and developing into leucoplast, chloroplast, or chromoplast pigment cell, or group of cells, which under control of the sympathetic nervous system can be altered in shape to produce colour change.

chromatophoretropi (krō'mātoforētrōp'ik) *a.* [Gk. *chroma* colour *phoros*, to bear *trope* turn.] *Appl.* a hormone intermedin, secreted by para intermedia of pituitary and causing expansion of chromatophores; *appl.* hormone of crustacean eye-stalk.

- chromatophyll (kr' mätöf'il) *n* [Gk. *chroma* colour *phyllon* leaf] The colouring matter of plant-like flagellates also chromatophyll.
- chromatoplasm (kr' mätöplázm) *n* [Gk. *chroma* colour *plasma*, mould.] The colour or pigment matter in cells.
- chr matosome, —chromosome.
- chromatopharite (kr' mätöf'er'it) *n*. [Gk. *chroma*, colour *sphaera*, globe.] A nucleolus, *q.v*
- chr midia (kr' mäd'ia) *n plu* [Gk. *chroma*, colour *idia* *diu*] Extra-nuclear particles of chromatin which may replace or be re-formed into nuclei.
- chromidial substance, — minut basophil granules containing iron, occurring in cytoplasm as chromophil or tigroid bodies.
- chromidiogamy (kr' mäd'ög'ärd) *n* [Gk. *chroma*, colour *idia* *diu* *gamos* marriage] The union of chromidia from two conjugants.
- chromidiosome (kr' mäd'öös'ma) *n. plu.* [Gk. *chroma* colour *diu* *diu*, some body] The smallest chromatin particles of which the chromidial mass is composed.
- chromiols (kr' mäl) *n* [Gk. *chroma* colour] One of the minute granules of which a chromosome is composed.
- chrome-arg taffin (kr' möärg'en täfn) *n*. [Gk. *chroma* colour *L. argentum* silver *affinis* related.] Staining with bichromates and silver nitrate *appl* flask-shaped cells in epithelium of crypts of Lieberkühn.
- chromoblast (kr' möbläst) *n* [Gk. *chroma*, colour *blastos* bud] An embryonic cell giving rise to pigment cell.
- chromocentr (kr' mösentr'är) *n* [Gk. *chroma* colour *kentron* centre.] The fused heterochromatic region around centromeres fused prochromosomes.
- chromocyte (kr' mösäl) *n*. [Gk. *chroma* colour *kytos* hollow] Any pigmented cell.
- chromogen (kr' möy'en) *n* [Gk. *chroma*, colour *genes* birth.] The substance which is converted into pigment *g* by oxidation chromogenic organism.
- chromogenic (kr' möy'en'tik) *n*. [Gk. *chroma* colour *genes* birth.] Colour producing *appl* organisms, as bacteria.
- chromolipides (kr' mölip'idz) *n. plu.* [Gk. *chroma*, colour *lipos* fat.] The carotenoids and related pigments.
- chrom mere (kr' möm'er) *n*. [Gk. *chroma*, colour *meros* part.] One of the chromatin granules of which chromosome is formed, and which corresponds to an id or a gene granular part of blood platelet, *appl* hyalomere.
- chromonema (kr' mön'ä mäl) *n*. [Gk. *chroma*, colour *nema* thread.] A coiled or convoluted thread in prophase of mitosis central thread in chromosome *Plu* chromonemata.
- chromophanes (kr' möf'äna) *n. plu* [Gk. *chroma* colour *phanes* to show] Red yellow and green oil globules found in retina of birds, reptiles fishes, marsupials any retinal pigments.
- chr mophil (kr' möf'il) *n*. [Gk. *chroma*, colour *philein* to love] Chromophil chromaffin, *q.v* chromophile.
- chromophilous (kr' möf'üts) *n*. [Gk. *chroma* colour *philos* loving] Staining readily.
- chromophobe (kr' möf'öb) *n*. [Gk. *chroma*, colour *phobos* fear] Non-stainable or staining slightly *appl* certain cells of pituitary gland chromaphobe.
- chromophore (kr' möf'ö) *n*. [Gk. *chroma*, colour *pherein* to bear] Any substance whose presence colour in a compound is due.
- chromophyll, —chromatophyll *q.v*
- chromoplast (kr' möpläst) *n* [Gk. *chroma* colour *plastos* moulded] A coloured plastid or pigment body coloured plastid other than chloroplast chromoplastid.
- chr moproten s (kr' möpr'öt'älas) *n plu* [Gk. *chroma*, colour *protes* first.] Substances formed by combination of protein with pigment or chromophore.





cilia (sī'lā) *n. plu.* [*L. cilium* eyelid.] Hairlike vibratile outgrowths of ectoderm or processes of many cells barbed of a feather eyelashes.

ciliaris (sī'lā'ris) *n.* [*L. cilium* eyelid.] Unstriped muscle forming a ring outside anterior part of choroid and attached to ciliary processes acting on convexity of lens.

ciliary (sī'lārī) *a.* [*L. cilium* eyelid.] *Part cilia* *appl* certain structures in the eyeball.

ciliate (sī'lāt) *a.* [*L. cilium* eyelid.] Provided with cilia ciliated.

ciliated epithelium,—an epithelium found lining various passages, usually with columnar cells provided with cilia on the free surface.

ciliograd (sī'lōgrād) *a.* [*L. cilium* eyelid *gradus* step.] Progressing by movement of cilia.

ciliospore (sī'lōspōr) *n.* [*L. cilium* eyelid *Gk. spora* seed.] A ciliated protozoan swarm-spore.

cilium (sī'līum) *n.* [*L. cilium* eyelid.] *Sing.* of cilia, *q.v.*

cinchonin (sīn'kōnīn) *n.* [After *Comtes de Chimchon.*] Alkaloid found in various Rubiaceae.

cincinnus (sīn'sīn'us) *n.* [*L. cincinnus* curl.] A scorpoid cyme.

cinelides (sīng'kīdēs) *n. plu.* [*Gk. kīnēlēs* latticed gate.] Perforations, in body wall of certain A thozoa, for extrusion of acoutia. *Sing.* cinclia.

cine'ra (sīn'ērā) *n.* [*L. cinereus* ashen.] The grey matter of the nervous system.

cingulate (sīng'gūlāt) *a.* [*L. cingulum* girdle.] Having a girdle or cingulum shaped like a girdle *appl* gyrus and sulcus above corpus callosum.

cingulum (sīng'gūlūm) *n.* [*L. cingulum* girdle.] Any structure which is like a girdle part of plant between root and stem part of diatom frustule uniting valves a ridge round base of crown of a tooth tract of fibres connecting callosal and hippocampal convolutions of brain outer ciliary

zone on disc of rotifers cithellum, *q.v.*

circinate (sēr'sīnāt) *a.* [*L. circinus* compasses.] Rolled on the axis, so that apex is centre.

circulation (sēr'kūlā'shūn) *n.* [*L. circulatio* act of circulating.] The regular movement of any fluid within definite channels in the body streaming movement of protoplasm of plant cells.

circulus (sēr'kūlūs) *n.* [*L. circulus* circle.] Any ringlike arrangement, as of blood-vessels caused by branching or connection with one another as circulus major of iris, or *an* of markings of fish scales.

circulus arteriosus,—a vascular ring at base of brain; circle of Willis.

circumduction (sēr'kūmdūk'shūn) *n.* [*L. circum* around *ducere* led.] The form of motion exhibited by bone describing a conical space with the articular cavity as apex.

circumferential (er'kūmfērēn'shāl) *a.* [*L. circum* around *ferre* to bear.] *Appl* cartilages which surround certain articulatory fossae *appl* primary lamellae parallel to circumference of bone.

circumfila (sēr'kūm'fīlā) *n. plu.* [*L. circum* around *filum* thread.] Looped or wreathed filaments on antennal segments, as in gall-midges.

circumflex (sēr'kūmfleks) *a.* [*L. circum* around *flectere* to bend.] Bending round *appl* certain arteries, veins *appl* nerve the axillary nerve.

circumflu'ac (sēr'kūm'flū'as) *n.* [*L. circum* around *fluere* flow ing.] I Protozoa, ingestion by protoplasm flowing towards food and surrounding it after contact of circumvallation.

circumgenital (sēr'kūmjēn'tāl) *a.* [*L. circum* around *gignere* to beget.] Surrounding the genital pore *appl* glands secreting waxy powder in oviparous species of Coccidae.

circumnutation (sēr'kūmnūtē'shūn) *n* [L. *circum*, around; *natus* to nod.] The irregular elliptical or spiral movement exhibited by pex of a growing stem, shoot or tendril.

circumoesophageal (sēr'kūmēsō'fāj ēl) *a*. [L. *circum* around; Gk. *esophagus* gullet.] *Appl.* structures or organs surrounding or passing along the gullet.

circumpolar (sēr'kūmpō'lār) *a*. [L. *circum* around; *polaris* end of axis.] *Appl.* flora and fauna of Polar regions.

circumpulpar (sēr'kūmpŭl'pār) *a*. [L. *circum* around; *pulpa* fruit pulp.] *Appl.* dentine forming layer around pulp cavity of teeth as in fishes.

circumscissile (sēr'kūmē'ssīl) *a*. [L. *circum*, around; *scindere* to cut.] Splitting along circular line *appl.* dehiscence exhibited by pyxidium.

circumscript (sēr'kūmā'skrīpt) *a*. [L. *circumscribere* to draw line around.] *Appl.* marginal spinuater when sharply defined, in sea-anemones.

circumvallate (sēr'kūm'vāl'ēt) *a*. [L. *circum*, around; *vallum* rampart.] Encircled by wall, as of tissue *appl.* certain tongue papillae.

circumvallation (sēr'kūm'vāl'ēshūn) *n* [L. *circum* around; *vallum* to wall.] Ingestion of food by extruded pseudopodia, as in protozoa or in phagocytes.

circumvascular (sēr'kūm'vās'kŭlār) *a*. [L. *circum* around; *vasculum* small vessel.] *Appl.* dentine lining vascular canals in pulp cavity of teeth, as in fishes.

cirrat (sēr'ēt) *a*. [L. *cirratum* having curls.] Having cirri.

cirrhous and cirrhi, —see cirrus.

cirrose (sēr'ōs, sēr'ōs') *a*. [L. *cirrus* curl.] With cirri or tendrils.

cirrus (sēr'ŭs) *n*. cirri (sēr'ī) *plm*. [L. *cirrus* curl.] Tendrils; pendants of barnacles; jointed filaments of axis or of aboral surface of crinoids; barbed of fishes; respiratory and tactile ap-

pendages of worms; organs of copulation in some molluscs and trematodes; hairlike structures on appendages of insects.

claterna (stēr'nā) *n*. [L. *cisterna* cistern.] Closed space containing fluid as any of the subarachnoid spaces.

citrin (sēr'itn) *n*. [L. *L. citrus* lemon.] A factor in lemon juice which regulates capillary permeability vitamin P.

citrulline (sērŭl'īn) *n*. [L. *citrullus* water melon.] An amino acid first obtained from water-melon, also occurring as intermediate product in formation of urea from ornithine  $C_4H_{15}O_3N_2$ .

cladanthous (klādān'thōs) [Gk. *klados* sprout; *anthos* flower.] Having terminal arthegonia on short lateral branches; cladocarpous.

clada toleous (klād'tōk ōs) *a*. [Gk. *klados* sprout; *anthos* self; *anthos* house.] With antheridia on a special stalk as in mosses.

cladocarpous, —cladanthous, *q.v.*

cladode (klād'ōd) *n*. [Gk. *klados* sprout.] Branch arising from axil of leaf or green flattened stem, resembling foliage leaf; cladophyll; phylloclade.

cladodont (klād'ōdōnt) *a*. [Gk. *klados* sprout; *odous* tooth.] Having or *appl.* teeth with prominent central and small lateral cusps.

cladoge eala (klād'ōjēn ēs) *n*. [Gk. *klados* sprout; *genesis* descent.] Branching of evolutionary lineages so as to produce new types.

cladogous (klād'ōjēns) *a*. [Gk. *klados* sprout; *genesis*, to produce.] Stem-borne *appl.* certain roots; cladanthous, *q.v.*

clad in (klādōm') *n*. [Gk. *klados* sprout.] The group of superficially situated rays in tracheae.

cladophyll (klād'ōfīl) *n*. [Gk. *klados* sprout; *phylon* leaf.] Cladoda.

cladoptosis (klād'ōptō'sis) *n*. [Gk. *klados* sprout; *ptosis* falling.] Annual or other shedding of twigs.

cladose (klād'ōs) *a*. [Gk. *klados* sprout.] Branched.

cladosiphonic (klád'ósifón'ík) *n.* [Gk. *klados* sprout *siphon* tube.] With insertion of leaf-trace on periphery of the axial stele *opp* phyllosiphonic.

cladotyl (klád'ótíl) *n.* [Gk. *klados* sprout *tylos* knob] A rhadus with one actine branched the other tylote clamp-connections — swellings on certain dikaryotic hyphae for passage of daughter nuclei to cell below with subsequent septum formation also occurring in whorls, for distribution of nuclei to hyphal branches.

clandestin (klándēs'tín) *n.* [L. *clandestinus* from *claus* secretly] Appl evolution which is at apparent in dult forms or of adult characters from ancestral embryonic characters.

clasmatocyt (kláz māt'óēt, klásmát'óēt) *n.* [Gk. *klasma*, fragment *tytos* hollow] A variable basiphil phagocyte or macrophage in areolar tissue histocyte

claspers (klás pērs) *n. pl.* [M E. *clasper*, *m* bold.] Rod-like processes on pelvic fins of certain male elasmobranchs outer gonapophyses of insects valves or harpes of male Lepidoptera any modification of an organ or part to enable the two sexes to clasp one another tendrils or climbing shoots.

claspettes, — harpagones, *q.v.*

class (klás) *n.* [L. *classis* division.] A division of phylum and divided into orders, in classification of plants or animals.

clathrate (kláth rát) *n.* [Gk. *klathra* lattice.] Lattice-like.

claustrum (klós'trúm) *n.* [L. *claus* from bar] In cerebral hemispheres, a thin layer of grey substance lateral to external capsule one of the Weberian ossicles in Cyprinidae and Characnidae.

clava (klá vá) *n.* [L. *clava* club.] The knob-like end of antenna of certain insects swelling at end of fasciculus gracilis of medulla oblongata.

clavate (klá vá) *n.* [L. *clava*, club] Club-shaped thickened at one end

clavicle (kláv'íkl) *n.* [L. *clavicula* small key] Collar bone forming anterior or ventral portion of shoulder girdle.

clavicular (kláv'ík'úlar) *n.* [L. *clavicula*, small key] Pert clavicle.

clavicularium (kláv'ík'úls ríúm) *n.* [L. *clavicula*, small key] The epiplastron of Chelonia probably corresponding to clavicles of other f rms.

clavola (kláv'ólá) *n.* [L. *clava* club.] The flagellar portion or terminal joints, of insect antenna.

clavula (kláv'úla) *n.* [L. *clava* club.] A monothal modification of triaxon spicule minute ciliated spine on fasciole of Spatangida

clavate sporophore of certain fungi.

clavus (klá vá) *n.* [L. *clavus* nail] The part of an hemelytron lying next scutellum in Hemiptera a projection or crotchet from scape of spiders ergot disease in gramin.

claw (kló) *n.* [A S *claw* claw] The unguis stalk of a petal; a sharp curved nail on finger or toe forceps of certain crustaceans curved prolegs on limb of insect.

clearing foot, — filamentous process of exopodite of second maxilla in Phyllocarida.

cleavage (klé' éj) *n.* [A S *cleave* to cut.] The series of karyokinetic divisions which change the egg into a multicellular embryo.

cleavage nucleus, — nucleus of fertilized egg or zygote produced by union of male and female pronuclei the egg-nucleus of parthenogenetic eggs.

clidol (klíd'ól) *n.* [Gk. *klis* bar; *os* egg] H wing or part. eggs enclosed within a shell membrane.

cleistocarp (klé'stókárp) *n.* [Gk. *kleistos* closed *karpos* fruit] Cleistothecium, *q.v.*

cleistocarpous (klé'stókárp'ós) *n.* [Gk. *kleistos* closed *karpos* fruit] Appl mosses with non-operculate capsules cleistocarpic.

- cleistogamic (klɛstɔgəm'ɪk) *n* [Gk. *kleistos* closed; *gamos* marriage.] *Part* possessed of characteristics of cleistogamy cleistogamous.
- cleistogamy (klɛstɔg'əmi) *n* [Gk. *kleistos* closed *gamos* marriage.] State of having small inconspicuous self-fertilizing flowers fertilization without opening of florets, *opp* chasmogamy
- cleistogen (klɛstɔjən) *n* [Gk. *kleistos* closed *gennao* descent.] A plant with cleistogamous flowers.
- cleistothecium (klɛstɔθɛ'ʃiəm) *n* [Gk. *kleistos* closed *theke* box.] An ascocarp which remains closed and produces its spores internally
- cleithrum (klɛθ'rəm) *n* [Gk. *kleithron* bar] The pair of additional clavicles in Stegocephalia clavicular element of some fishes.
- climacteric (klɪmæktɪk'ɪk) *n* [Gk. *klīmaktēr* step of staircase.] A critical phase or period of change, in living organisms *opp* change associated with menopause *opp* phase of increased respiratory activity at ripening of fruit.
- climatype (klɪ mæ'tɪp) *n* [Gk. *klīmos*, climate *typos* image.] A biotype resulting from selection in particular climate climatic ecotype.
- climax (klɪ'mæks) *n* [Gk. *klīmax* ladder] The mature or stabilized stage in a successional series of communities, when dominant species are completely adapted to environmental conditions completion of development, *opp* leaves.
- climandrium (klɪmæn'drɪəm) *n* [Gk. *klīnos* bed *aner* man.] A cavity in the column between anthers in orchids.
- cline (klɪn) *n* [Gk. *klīnō* to slant.] A series of form changes; gradient of biotypes character-gradient.
- clinging fibres,—tendrils fibres, *q.v*
- clinidium (klɪnɪ'dɪəm) *n* [Gk. *klīnidos* small couch.] A filament in a pycnidium, which produces spores.
- clinoid (klɪ'nɔɪd) *n* [Gk. *klīnos* couch *eidos* form.] *Appl* processes of sella turcica.

- clinoporangium (klɪ'nɔspɔrən'ʃɪəm) *n* [Gk. *klīnos* bed *spora* seed *angurion* vessel.] Pycnidium, *q.v*
- clitellum (klɪtɛ'lɪəm) *n* [L. *clitellus* pack-saddle.] The middle or swollen glandular portion of skin of certain annelid worms.
- clitoris (klɪ'tɔrɪs) *n* [Gk. *kleidō* to enclose.] An erectile organ homologous with penis, at upper part of vulva.
- clivus (klɪ'vəs) *n* [L. *clivus* slope.] A shallow depression in phenoid behind dorsum sellae posterior sloped part of the menisculus.
- cloaca (klɔə'kə) *n* [L. *cloaca* sewer] The common chamber into which intestinal, genital, and urinary canals open in vertebrates except most mammals.
- clo (klɔn) *n* [Gk. *klōn* twig] An individual produced asexually group of individuals propagated by mitosis from single ancestor an apomict strain.
- clonus (klɔn'əs) *n* [Gk. *klōnos* violent motion.] A series of muscular contractions when individual contractions are discernible in complete tetanus.
- cluste-crystals,—globula aggregates of calcium oxalate crystals in plant cells sphaeraphides.
- luster-cup—accidium, *q.v*
- clypeal (klɪp'eəl) *n* [L. *clypeus* shield.] *Part* clypeus of insects.
- clypeate (klɪp'eɪt) *n* [L. *clypeus* shield.] Round or buckler-like clypeiform having a clypeus.
- clype la (klɪp'e'li) clypeal (klɪp'e'li) *n* [L. *clypeus* shield.] A sporophyll in the spike of an Equisetum.
- clypeo-labral (klɪp'e'liəb rəl) *n* [L. *clypeus* shield *labrum* lip.] *Appl* suture between clypeus and labrum.
- clypeus (klɪp'eəs) *n* [L. *clypeus* shield.] A sclerite on anteromedian part of insect head a band of thence round mouth of peritheciium of certain fungi.
- cnemial (knɛ'mɪəl n'mɪəl) [Gk. *knēmīs* legging] *Part* tibia *opp* ridge along dorsal margin of tibia.

- cnemidium** (knēmīd'ium, nēmīd'ium) *n.* [Gk. *knēmis* legging *idiom dim*] Lower part of bird's leg devoid of feathers, generally scaly.
- cnemi** (knēmīs, nēmīs) *n.* [Gk. *knēmis* legging] Shin tibia.
- cnida** (knīdā nī'dā) *n.* [Gk. *knide* nettle.] A cnidoblast; a nematocyst.
- cnid blast** (knīdōblāst, nī'dōblāst) *n.* [Gk. *knide* nettle *blastos* bud.] Stinging cell of Coelentera.
- cnidocil** (knīdōsil, nī'dōsil) *n.* [Gk. *knide* nettle *L. cilium* eyelid.] A minute process projecting externally from cnidoblast.
- cnidophore** (knīdōfōr, nī'dōfōr) *n.* [Gk. *knide* nettle *phoros* to bear.] A modified zooid which bears nematocysts.
- cnidopod** (knīdōpōd, nī'dōpōd) *n.* [Gk. *knide* nettle *podus* foot.] Drawn-out basal part of nematocyst embedded in mesogloea.
- cnidosac** (knīdōsāk, nī'dōsāk) *n.* [Gk. *knide* nettle *sakhe* bag.] A kidney-shaped swelling battery skin protected by a hood found on dactylozooids of Siphonophora.
- coaction** (kōāk'ashūn) *n.* [L. *co-* with *actio* action] The reciprocal activity of organisms with community.
- coadaptation** (kōādāptēshūn) *n.* [L. *co-* with *ad* to *aptus* to fit.] The correlated variation in two mutually dependent organs.
- coagulation** (kōāgūlāshūn) *n.* [L. *co-* with *agere* to drive] Curdling clotting the changing from a liquid to a viscous or solid state by chemical reaction *appl* vitamin K the antihæmorrhagic accessory food factor.
- coagulin** (kōāg'ūlin) *n.* [L. *coagulum* renet.] Any agent capable of coagulating albuminous substances.
- coagulum** (kōāg'ūlūm) *n.* [L. *coagulum* renet.] Any coagulated mass clot curd.
- coarctate** (kōārk'tē) *n.* [L. *co-* to press together] Com-

pressed closely connected with abdomen separated from thorax by a constriction.

**coarctat larva or pupa**,—semi-pupa pseudopupa a larval stage of certain Diptera.

**cocci** (kōk'i) *n. plur* [Gk. *kakkes* berry] Septicidal carapels spore mother cells of certain hepatics rounded cells, as certain bacteria.

**coccigone** (kōk'igūn) *n.* [Gk. *kakkes* berry *gonas* birth.] A reproductive cell in certain algae.

**coccolid** (kōk'oid) *n.* [Gk. *kakkes* berry *oides* form.] Like or part a coccus spherical or globose.

**coccolith** (kōk'ōlith) *n.* [Gk. *kakkes* berry *lithos* stone.] A calcareous spical in certain Flagellata.

**coccospheres** (kōk'ōsfēr) *n. plur* [Gk. *kakkes* berry *pheros* globe] Remains of hard parts of certain algae and radiolarians.

**coccus** (kōk'ūs) *n.* [Gk. *kakkes* berry] Sing of cocci *g.*

**coccygal** (kōk'aj ēl) *n.* [Gk. *kakkyx* cuckoo.] Part or in region of coccyx.

**coccyx** (kōk'ēks) *n.* [Gk. *kakkyx* cuckoo] The terminal part of the vertebral column beyond the sacrum.

**cochlea** (kōk'lē) *n.* [Gk. *kochlias* snail.] Anterior part of labyrinth of the ear spirally coiled like a snail's shell.

**cochl ar** (kōk'lēār) *n.* [Gk. *kochlias* snail.] *Appl* aestivation when wholly internal leaf is next but one to wholly external leaf *part* the cochlea.

**cochl ariform** (kōk'lēār'fōrm) *n.* [Gk. *kochlias* snail *L. forma* shape.] Screw or spoon-shaped *part* the plate or process of bone separating tensor tympanal canal from Eustachian tube.

**cochleate** (kōk'lēāt) *n.* [Gk. *kochlias* snail] Screw like spiral.

**cocoon** (kōk'oon) *n.* [F. *cocoon* cocoon.] The protective case of many larval forms before they become pupae silky or other covering formed by many animals for their eggs.

coelari m.—coelomic epithelium mesothelium.

coel erton (sēl'ēn'tērōn) *n*. [Gk. *koilos* hollow *enteron* intestine.] Cavity in body of Coelenterata.

coeliac (sē'liak) *a*. [Gk. *kōilia*, belly.] *Part* the abdominal cavity *appl* arteries veins, nerves, plexus.

coeloblast (sē'lōblāst) *n*. [Gk. *koilos* hollow; *blastos* bud.] A division of the embryonic hypoblast.

coelocoel (sē'lōkōēl'ik) *n*. [Gk. *koilos* hollow; *kōnos* cone.] Having or consisting of a conical process situated in a pit *appl* scutellum.

coelogastrula (sē'lōgās'troolā) *n*. [Gk. *koilos* hollow *gaster* stomach.] A gastrula developed from blastula with a segmentation cavity.

coel m (sē'lōm) *n*. [Gk. *kōeloma*, hollow.] Body cavity *g.s*

coelomate (sē'lōmāt sē'lō'māt) *a*. [Gk. *kōeloma* hollow.] Having coelom.

coel mesoblast (sē'lōmēs'ōblāst) *n*. [Gk. *koilos* hollow; *mesos* middle *blastos* bud.] 1 segmentation, the mesoblastic bands destined to form wall of coelom and outgrowths.

coelomic (sē'lōm'ik) *a*. [Gk. *kōeloma*, hollow.] *Part* a coelom.

coelomocytes (sē'lō'mōsēts) *pl*. [Gk. *kōeloma* hollow *kytos* hollow vessel.] Coelomic corpuscles, including amoebocytes and leucocytes, in annelids mesenchymatous cells in body cavity of nematodes.

coel mod ct (sē'lō mod'ikt) *n*. [Gk. *kōeloma*, hollow *l. ducere* to lead.] A channel leading from body cavity to exterior.

coelomopores (sē'lō'mōpōrēs) *n. pl.* [Gk. *kōeloma*, hollow *poros* passage.] Ducts leading directly from pericardial cavity to exterior peculiar to Nautilus.

coel mostom (sē'lō'mōstōm) *n*. [Gk. *kōeloma*, hollow *stoma*, mouth.] The external opening of coelomoduct.

coelospem (sē'lōspēm) *n*. [Gk.

*koilos* hollow *sperma* seed.] A carpel hollow on its inner surface.

coelozoic (sē'lōzō'ik) *a*. [Gk. *koilos* hollow *zoō* animal.] *Appl* a trophozoite when situated in some cavity of the body.

coenanthium (sēnānthiūm) *n*. [Gk. *kōinos* common *anthos* flower.] Inflorescence with a nearly flat receptacle having upcurved margins.

coenenchyma (sēnēng'kimā) coenenchym (sēnēng'lim) *n*. [Gk. *kōinos* common *enchyma* infusion.] Common tissue which connects the polyps or zooids of a compound coral.

coenobium (sēnō'bīūm) *n*. [Gk. *kōinos* common *Hier* life.] A unicellular colony with no marked distinction between vegetative and reproductive units colony + unit of undifferentiated cells.

coenoblast (sēnōblāst) *n*. [Gk. *kōinos* common *blastos* bud.] A germ-layer which gives origin to endoderm and mesoderm.

coenocentre (sē'nōsēn'tēr) *n*. [Gk. *kōinos* common *kentron* centre.] A deeply-staining body accompanying the ovum in certain fungi.

coenocyt (sē'nōsēt) *n*. [Gk. *kōinos* common *kytos* hollow.] A plant body in which constituent protoplasts are not separated by cell walls.

coenocoetum (sēnō'sēūm) *n*. [Gk. *kōinos* common *oikos* house.] The common groundwork of polycyan colony.

coenogamete (sē'nōgāmēt') *n*. [Gk. *kōinos* common; *gametes* spouse.] A multiockete gamete.

coenogenesis (sē'nōjēn'ēsēs) [Gk. *kōinos* common *genesis* descent.] Common descent from the same ancestry blood relationship.

coenosare (sē'nōsērē) *n*. [Gk. *kōinos* common *sarx* flesh.] The common tissue uniting the polyps in a compound colony.

coenosteum (sēnō'sēūm) *n*. [Gk. *kōinos* common *osteon*, bone.] The common colonial skeleton in corals.

coenozygote (sēnōz'gōt) *n.* [Gk. *koinos* common *zygon* yoke.] A zygote formed by coenogametes.

coenurus (sēnō rūz) *n.* [Gk. *koinos* common *nurus* tall.] A metacystode with large bladder from whose walls many daughter-cysts arise each with one scolex.

co-enzyme (kō'ēn sīm) *n.* [L. *cum* with Gk. *en* in *synus* heaven.] A substance which activates an enzyme or accelerates its action co-ferment.

cog-tooth,—spur or projection of incudal facet of malleus.

coherent (kōhē rēnt) *a.* [L. *coherere* to stick together] With similar parts united different.

cohesion (kōhē'zhūn) *n.* [L. *coherere* to stick together] Condition of union of separate parts of floral whorl / adhesion

cohort (kō'hōrt) *n.* [L. *cohors* enclosure.] A group of related families in earlier classifications somewhat indefinitely limited group

coiti *n.* (kōtāh ē) *n.* [L. *cuius* to go together] Sexual intercourse coitus copulation.

colchicine (kōl'chīn) *n.* [L. *colchicum* meadow saffron, from *Colchis* ancient Mingrelia.] An alkaloid obtained from meadow saffron, inflicting mitosis and tissue metabolism  $C_{20}H_{22}O_N$

coleogen (kōl'ēōjēn) *n.* [Gk. *kolos* sheath *gennao* to produce.] Meristematic layer giving rise to endodermis.

coleopterous (kōl'ēōp tērūs) *a.* [Gk. *kolos* sheath *pteron* wing] Having the anterior wings hard and used as elytra *for* beetles.

leoptil (kōl'ēōptil) *n.* [Gk. *kolos* sheath *ptilon* feather] The first leaf in seedling of monocotyledons.

coleorhiza (kōl'ēōr'zā) *n.* [Gk. *kolos* sheath *rhiza*, root.] The layer surrounding the radicle.

colic (kōl'ik) *a.* [Lk. *kolon* colon] *For* the colon

collagen (kōl'ajēn) *n.* [Gk. *kollos* glue *gennao* descent.] A scleroprotein, occurring as chief constituent of white connective tissue

fibres and organic part of bone also of some fish scales

collar (kōl'ār) *n.* [M E. *caler* collar] The corona of a collared cell a prominent fold behind the proboscis in Hemichorda the fleshy rim projecting beyond the edge of a small abell any structure comparable with a collar collum, *q.v.* junction between root and stem collect, *q.v.*

collateral (kōlāt'ērāl) *a.* [L. *cum* with *latero*, sides.] Side by side *appl* ovules *appl* bundles with xylem and phloem in the same radius *appl* fine lateral branches from the axon of a nerve cell *appl* prevertebral ganglia of sympathetic system *appl* inheritance of character from a common ancestor in individuals not linearly related *appl* circulation established through anastomosis with other parts when the chief vein is obstructed.

collenchyma (kōlēng'kimā) *n.* [Gk. *kollos* glue *enchyma* infusion.] Parenchymatous peripheral supporting tissue with cells more or less elongated and thickened, either at the angles (angular) or on walls adjoining intercellular spaces (lacunar c.) or tangentially (lamella c.) the middle layer of sponges collenchyme.

collencyte (kōl'ēnsit) *n.* [Gk. *kollos* glue *en* *kytos* hollow] A clear cell with thread like pseudopodia found in sponges.

collet (kōl'ēt) *n.* [F *collet* collar] Root zone of hypocotyl where cuticle is absent.

colleterial *m.* (kōl'ēt'ērīāl) *n.* [Gk. *kollos* glue] A colleterial or mucus-secreting gland in female reproductive system of insects.

collet rs (kōl'ēt'ers) *n. plu* [Gk. *kollos* glued] The hairs, usually secreting a gluey substance which cover many resting bud multicellular glandular trichomes.

colletocystophore (kōl'ēōstōfōr) *n.* [Gk. *kollos* glued *kytos* bladder *phoros* to bear] The statorhabd of Haliclystus.

colliculus (kól'ík'úls) *n.* [L. *collis* little hill] A prominence of corpora quadrigemina rounded elevation near apex of antero-lateral surface of aryaenoid cartilages slight elevation formed by optic nerve at entrance to retina elevation of urethral crest, with openings of ejaculatory ducts and prostatic utricle.

coll blast (kól'óbliás) *n.* [Gk. *kollos*, glue *blastos* bud.] A cell on tentacles and pinnae of ctenophores, which carries little globules of adhesive substance lasso-cell

colloid (kól'oid) *n.* [Gk. *kollos*, glue *eidos* form.] A gelatinous substance which does not readily diffuse through an animal or vegetable membrane *opp.* crystalloid substance composed of two homogeneous parts or phases, one of which is dispersed in the other

cellophore (kól'ófor) *n.* [Gk. *kollos* glue *phoros* to bear] The ventral tube of Collembola.

coll *m.* (kól'úm) *n.* [L. *collum* neck.] Neck colla *q.v.*; any collar like structure dorsal plate of first body-segment in Diplopoda basal portion of sporogonium in mosses.

colon (kól'ón) *n.* [Gk. *kolón* colon.] The second portion of intestine of man; part of the large intestine of vertebrates.

colony (kól'óni) [L. *colonia*, farm.] Any collection of organisms living together *appl.* ants, bees a group of animals or plants living together and somewhat isolated or established in new area comobium group of bacteria or of other micro-organisms in culture.

colostrum (kól'ós'trúm) *n.* [L. *colostrum*] Milk secreted at and of pregnancy and differing from that secreted later

colulus (kól'úls) *n.* [Dim. of L. *collis* duff.] A small conical structure between anterior spinnerets of spiders.

columnella (kól'úmél'á) *n.* [L. *colus mella*, small column.] A prolongation of stalk into sporangium

central core | root-cap central pillar | skeleton of some corals the central pillar in gastropod shells epipterygoid the rod, partly bony partly cartilaginous, connecting tympanum with inner ear in birds, reptiles, and amphibians the axis of cochlea lower part of nasal septum.

columnellar (kól'úmél'ár) *a.* [L. *colus mella* small col. ma.] Pert. col. mella.

column (kól'úm) columna (kól'úm ná) *n.* [L. *columna* pillar] Any structure like a column, as spinal column actinian body stalk of a crinoid longitudinal bundle of nerve fibres in white matter of spinal cord nasal septum edge thick muscular strands found in ventricles stamens in mallows united stamens and style in orchids. columnals (kól'úm náks) *n. pl.* [L. *columna* pillar] Stem ossicles in crinoids.

columnar (kól'úm nár) *a.* [L. *columna* pillar] Pert. like, column or columna *appl.* cells longer than broad *appl.* epithelium of columnar cells.

coma (kó má) *n.* [Gk. *komos* ha.] A terminal cluster of bracts, as in pine-*appl.* hair tufts on certain seeds. [Gk. *komos* deep sleep.]

Sturpo comb-ribs, combs, — see swimming plates.

com (kó'mík) *n.* [L. *comer* companion.] A blood vessel that runs alongside nerve.

comital (kómítál) *n. pl.* [L. *comitari* to accompany] Small di- or tri-actine spicules in sponges.

comma (kóm'á) *n.* [Gk. *komma*, short clause.] A sarcomere incoquina *appl.* tract certain nerve fibres in dorsal or posterior column of spinal cord *appl.* bacillus, the spirillum causing cholera.

commensal (kómén sál) *n.* [L. *com* with *mensa*, table.] An organism living with another and sharing the food both species as rule benefitting by the association.



comminator (*kōm'īnītōr*) *a.* [*L. com.* with *minari* to threaten.] *Appl* muscles which connect adjacent jaws in Aristotle's lantern.

commissure (*kōm'īshūr*) *n.* [*L. com.* *missura*, seam.] The union-line between two parts. Inner side of mericarp; carpellary cohesion plane. a connecting band of nerve tissue.

comose (*kō mōs*) *a.* [*L. comatus* hairy] Hairy. having a tuft of hairs.

companion cell—a narrow cell retaining its nucleus derived from cell giving rise also to a sieve-tube element, in phloem of angiosperms.

compassa (*kōm pās*) *n.* [*L. com* together *passus* pace.] A curved bilid ocellus part of Aristotle's lantern.

compass plants,—certain plants with permanent north and south direction of their leaf edges.

compensation point,—incidence of balance between respiration and photosynthesis as determined by intensity of light at a given temperature. compensation intensity limit of sea depth below which plants lose more by respiration than they gain by photosynthesis. compensation depth.

competence (*kōm pētēs*) *n.* [*L. competere* to suit.] Reserve state permitting directional development and differentiation in response to a stimulus, as of part of an embryo response to an evocator or organising stimulus.

complement (*kōm plēmēt*) *n.* [*L. complere* to fill up.] The substance in the blood-serum which when destroyed by heat acts with an amoceptor to produce lysis. alexin group composed of one two or more globulins. chromosome sets derived from single nucleus.

complemental air—volume of air which can be taken in addition to that drawn in during normal breathing.

completely male,—a purely male

form usually small found living in close proximity to the ordinary hermaphrodite form in certain animals, as barnacles.

complementary (*kōm plēmētārī*) *n.* [*L. complere* to fill up.] The coronoid bone. *a. Appl* non-suberised cells loosely arranged in cork tissue and forming air passages. *appl* genes producing a similar effect when inherited separately but a different effect together.

complexus (*kōmplēks*) *n.* [*L. complexus* embrace.] An aggregate *appl* muscle the somo-spinalis capitis.

complicant (*kōm plikānt*) *a.* [*L. com* together *plicare* to fold.] Folding over one another *appl* elytra of certain insects.

complicate (*kōm plikāt*) *a.* [*L. com* together *plicare* to fold.] Folded. conduplicate *appl* leaves folded longitudinally so that light and left halves are in contact *appl* insect wings.

composite (*kōm pōit*) *a.* [*L. com* together *ponere* to place.] Closely packed as capitulum *appl* fruits, as sorosis syconus, strobilus.

comp and (*kōm pōnd*) *a.* [*L. com* together *ponere* to place.] Made up of several elements *appl* flowers, petiole leaves modified rays eyes etc *appl* starch grains with two or more hila.

compressor (*kōmprēs*) *n.* [*L. com* together *primere* to press.] Something that serves to compress *appl* muscles, as compressor naris.

conarium (*kōnārīum*) *n.* [*Gk. kōnārion* little cone.] Transparent deep-sea larva of Vella the pincal gland or epiphys cerebri.

concatenate (*kōnkātēnāt*) *a.* [*L. com* together *catenatus* chained.] Forming a chain, as spores.

concentric (*kōnśēntrik*) *a.* [*L. com* together *centrum* centre.] Having common centre *appl* vascular bundles with one kind of tissue surrounding another *appl* corpuscles of Howell.

conceptacle (kōnsēp'takl) *n* [L. *conceptare* to conceive.] A depression in thallus of certain algae in which gametangia are borne.

conceptive (kōnsēp'tī) *a*. [L. *conceptor* to conceive.] Capable of being fertilised and producing an embryo.

concha (kōng'kā) *n* [Gk. *konche* shell.] The cavity of the external ear which opens into the external acoustic meatus; a superior middle and inferior projection from lateral wall of nasal cavity; turbinal body; one of the curved plates of sphenoidal bone. *marine shell*

conchiform (kōng'kīfōrm) *a*. [L. *concha* shell *forma* shape.] Shaped like concha shell-shaped conchoid.

conchiolite (kōng'kīōlīt) *n*. [Gk. *konche* shell.] The organic substance that forms the basis of shells of molluscs.

conchology (kōng'kōl'ōjī) *n* [Gk. *konche* shell *logos* discourse.] The branch of zoology dealing with molluscs or their shells.

conchula (kōng'kūlā) *n*. [L. *concha* shell.] The conspicuous protuberant lip of the modified sulcus in *Peachia*.

concolorate (kōnkōl'ōrīt) *a*. [L. *concolor* of the same colour.] Similarly coloured on both sides.

concrecence (kōnkres'ens) *n*. [L. *concrecere* to grow together.] The growing together of parts.

concrete (kōnkretī) *a*. [L. *concretus* grown together.] Grown together to form single structure.

condensate (kōndēnsē shūn) *n* [L. *condensatio* from *condere* to make thick.] Process of making becoming thick contraction, thickening and spirulation of chromatids during prophase.

condensed (kōndēns'ed) [L. *condensare* to press close together.] *Appl* Inflorescence with short stalked or sessile flowers closely crowded.

conditional.—*appl* dominance owing to influence of modifying genes

condition d—*appl* reflex depending on new functional connections; central nervous system; *appl* stimulus inducing conditioned reflex.

conducting (kōndūk'īng) *a*. [L. *conducere* to lead together.] Conveying *appl* tissues bundles.

co-duction (kōndūk'shūn) *n* [L. *conducere* to lead together.] The transference of soluble matter from one part of plant to another; the transmission of an excitation, function of nervous system.

co-ductivity (kōndūk'ītī) *n* [L. *conducere* to lead together.] Power of transmitting an impulse.

co-ductor (kōndūk'tōr) [L. *conduttore* to lead together.] That which can transmit a projection to base of embolus in spiders.

conduplicate (kōndūp'likāt) *a*. [L. *conduplicare* to fold together.] *Appl* cotyledons folded to embrace the radical *appl* vernation when one half of the leaf is folded upon the other.

condylar (kōndīlār) *a*. [Gk. *konnylos* knuckle.] *Peri.* condyle.

condyl (kōndīl) *n*. [Gk. *konnylos* knuckle.] The ambleridium of stoneworts process on bone for purposes of articulation rounded structure adapted to fit into socket.

condyloid (kōndīlōid) *a*. [Gk. *konnylos* knuckle *eidos*, form.] Shaped like or situated near a condyle.

co- (kōn) *n*. [Gk. *komai* cone.] The female flower of Coniferae with woody axis and spirally-arranged carpels; strobile; terminal spike or fructification in clubmosses and horsetails; a conical elevation on an egg just before fertilization; conical or flask-shaped cell of the retina.

con- of origin.—small clear area of nerve cell at the point of exit of the axon; implantation cone; axon hill.

con- of Wulsen (*R. Wulsen* American physiologist). A structure projecting forwards from pars intermedia into hypophyseal cavity in pituitary region of ox and pig.

cone-bipolar, — bipolar cells whose inner ends ramify in contact with dendrites of ganglionic cells.

confluence (kōn'flooēns) *n.* [L. *confluere* with *fluere* to flow] Angl. of union of superior sagittal and transverse sinuses 1 occipital bone torcular Herophyll.

congen ric (kōn'jēn'rīk) *a.* [L. *congener* of same race.] Belonging to the same genus.

congeneti (kōn'jēn'ētīk) *a.* [L. *con* with Gk *genesis* descent.] Having the same origin alike in descent.

congenital (kōn'jēn'tā) *a.* [L. *con* with *gignere* to beget.] Present at birth born with.

co gestic (kōn'jēs'tīk) *n.* [L. *congestus* heaped up.] A toxin of sea anemone tentacles.

co gi bates (kōn-giō'bāt) *a.* [L. *conglobatus* formed into a ball.] Ball-shaped *appl* gland on lower side of ductus ejaculatorius in insects.

conglomerate (kōn-giōm'ērāt) *a.* [L. *con* together *glomerare* to wind.] Bunched or crowded together.

congressal (kōn'grēs'hāl) *n.* [L. *congressus* meeting.] Chromosome movement to equatorial plane of spindle at metaphase.

conic (kō'nīk) *n.* *f. n.* [L. *conus* cone.] Cones con. vascular lobules forming head of epididymus.

conidial (kōnid'iāl) *a.* [Gk. *konis* dust *idion* dim.] Pert. conidium.

conidiferous (kōnid'if'ērūs) *a.* [Gk. *konis* dust *idion* dim L. *ferre* to bear.] Bearing conidia.

conidiocarp (kōnid'īōkār) *n.* [Gk. *konis* dust *idion* dim *karpos* fruit.] A collection of conidiophores enclosed in covering pyrenidium.

conidiophore (kōnid'īōfōr) *n.* [Gk. *konis* dust *idion* dim *phoros* to bear.] A hypha with sterigmata which bear conidia.

conidiospore (kōnid'īōspōr) *n.* [Gk. *konis* dust *idion* dim *spora* seed.] Spore or conidium produced when dry conditions inhibit

reproduction by zoospores, in Phycomyces.

conidium (kōnid'iūm) *n.* [Gk. *konis* dust *idion* dim.] A fungal spore asexually produced by constriction of sterigma or of part of a hypha gonidium.

coniferous (kōn'if'ērūs) *a.* [L. *conus* cone *ferre* to bear.] Cone-bearing.

conjugate (kōn'jōogāt) *v.* [L. *conjugare* to join together.] T unite, as protozoa; to undergo conjugation. United in pairs *appl* pores altered by a groove *appl* division in pairs of monoploid nuclei.

conjugated (kōn'jōogātēd) *a.* [L. *conjugare* to join together.] United *appl* proteins when molecular united to non protein molecule.

conjugation (kōn'jōogā'shōn) *n.* [L. *con* together *jugare* to yoke.] The temporary union or complete fusion of two gametes or unicellular organisms the pairing of chromosomes.

conjunctiva (kōn'jūngktī'vā) *n.* [L. *con* together *jugare* to join.] Mucous membrane of eye lining eyelids and reflected over fore part of sclera and constituting corneal epithelium.

conjunctive (kōn'jūngktī'v) *a.* [L. *con* together *jugare* to join.] *Appl* parenchyma cells in inter spaces of stelar elements.

connate (kōn nāt kōnāt) *a.* [L. *con* together *natus* born.] Firmly joined together from birth connate-perfoliate joined together at base so as to surround stem *appl* opposite sessile leaves.

connective (kōn'ēktī'v) *n.* [L. *con* vector to bind together.] A connecting band of nerve tissue between two ganglia tissue separating two lobes of another.

connective tissue, —a mesoblastic tissue with large amount of intercellular substance and usually connecting and supporting other tissues.

- c annexum** (kōnēk'sivūm) *n.* [*L. connectere* to (fasten together)] Flattened lateral margin of abdomen in bugs.
- concurrent** (kōn'sivēnt) *a.* [*L. concurrere* to close the eyes.] Converging arching over so as to meet.
- conoid** (kō nōid) *a.* [*Gk. konos cone eldes form.*] Cone-like but not quite conical.
- conoid ligament**,—one of the fasciculi of the coraco-clavicular ligament.
- conoid tubercle**,—coracoid tubercularity small rough eminence on posterior border of clavicle serving for attachment of conoid ligament.
- conotheca** (kōnōthē'kē) *n.* [*Gk. konos cone theke case.*] Thin integument of phragmotocoon.
- c consensual** (kōn'sēn'shāl) *a.* [*L. consensurus* agreement.] *Appl* in voluntary action correlated with voluntary action reacting to excitation of a corresponding organ *appl* contraction of both pupils when only one retina is directly stimulated.
- consociation** (kōn'shōsh'ashūn) *n.* [*L. consociatio* partnership.] A unit of plant association characterised by single dominant species.
- consociates** (kōn'shōsh'ēsh) *n.* [*L. consociare* to join together] *metas* fellow] A consociation representing a stage in the process of succession.
- consorters** (kōn'shōr'tēs) *n. pl.* [*L. consociari* partners] Associate organisms other than symbionts, commensals, or hosts and parasites. *Sing* consort.
- consortium** (kōn'shōr'tiūm) *n.* [*L. consociation* partnership] The compound thallus of lichens.
- constricted** (kōn'strīk'tēd) *a.* [*L. constricere* drawn together] Narrowed compressed at regular intervals.
- constriction** (kōn'strīk'ashūn) *n.* [*L. constricere* drawn together] A constricted part or place as node of Ranvier non-spiralling chromosome segments at metaphase

- either associated with the centromere, or acentric or controlled by the nucleolus.
- constrictio** (kōn'strīk'tōr) *n.* [*L. constricere* drawn together] A muscle which compresses or constricts *g* constrictor pharyngis *c.* urethrae.
- consute** (kōn'stūt) *a.* [*L. consuer* to sew together] With stitch like markings *appl* elytra of certain beetles.
- contabescence** (kōn'tābēs'ēns) *n.* [*L. contabescere* to waste away] Abortion or atrophy of stamens.
- contact receptor**—a receptor in epidermis or in dermis.
- context** (kōn'tēkst) *n.* [*L. con* together *texere* to weave.] The layers developed between hymenium and true mycelium in certain fungi.
- continuity** (kōn'tin'yū) *n.* [*L. continuus* continuous.] Succession without break, especially continuity of germ plasma.
- contorted** (kōn'tōr'tēd) *a.* [*L. contorere* twisted together] Twisted; *appl* acutivation in which one leaf overlaps the next with one margin, and is overlapped by the previous on the other.
- contortuplicate** (kōn'tōr'tūpūkāt) *a.* [*L. con* with *torere* to twist *foldare* to fold.] *Appl* bud with contorted and plicate leaves.
- contour** (kōn'toor) *n.* [*F contourner* to twist.] Outline of a figure or body *appl* outermost feathers that cover the body of bird.
- contractile** (kōn'trāk'tīl) *a.* [*L. con* together *trahere* to draw] Capable of contracting.
- contractile cell**,—any cell in a sporangium or an anther wall which by hygroscopic contraction helps to open the organ.
- contractile fibre-cells**,—elongated spindle-shaped more or less polyhedral nucleated muscle-cells, containing a central bundle of fibrillae.
- contractile vacuole**,—a small spherical vesicle found in cytoplasm of many Protozoa, with excretory or hydrostatic function.

contractility (kōn trāktīl'itē) *n*. [L. *con* together *trahere* to draw] The power by which muscle-fibres are enabled to contract.

contractin, — presumable neuro-humor inducing contraction of chromatophores in crustaceans. *Opp* expantin.

contracture (kōntrākt'ūr) *n*. [L. *contractus* drawn together] Contraction of muscles persisting after stimulus has been removed.

contra-deciduate (kōn'trādēsīd ūt) *a*. [L. *contra* opposite to *decidere* to fall off.] *Appl* foetal placenta and distal part of allantois.

contratant (kōn'trānā'tānt) *a*. [L. *contra*, against *natare* to swim.] Swimming or migrating against the current, *opp* denatant.

conuli (kō nūli) *n* *pl*. [Dim of L. *conus* cone.] Tent-like projections on surface of certain sponges caused by principal skeletal elements.

conus (kō'nūs) *n*. [L. *conus* cone.] Any cone-shaped structure as conus arteriosus, a structure between ventricle and aorta in fishes and amphibians diverticulum of right ventricle from which pulmonary artery arises conus medullaris the tapering end of spinal cord.

converge *ce* (kōnvēr'sēs) *n*. [L. *convergere* to incline together] The development of similar characters in organisms belonging to different groups heterogenetic homoeomorphosis homoplasy

convolute (kōn vōlūt) *a*. [L. *con* together *volvere* to wind.] Rolled together *appl* leaves and cotyledons *appl* shells in which outer whorls overlap inner coiled convoluted *appl* parts of renal tubule.

convolution (kōn'vōlūt shōn) *n*. [L. *con* together *volvere* to wind.] A coiling or twisting as of brain, intestine.

coprodaeum (kōp rōdē'ūm) *n*. [Gk. *kopros* dung *oides* way] The division of cloaca which receives rectum.

coprolite (kōp rōlit) *n*. [Gk. *kopros*

dung *lithos* stone.] Petrified faeces.

coprophagous (kōprōf'āgūs) *a*. [Gk. *kopros* dung *phagere*, to eat.] Feeding on dung *appl* insects.

coprophil (kōp rōfil) *a*. [Gk. *kopros* dung *philes* loving] *Appl* dung bacteria and flagellates; coprophytic.

coprozoic (kōp rōzō'ik) *a*. [Gk. *kopros* dung *zōon* animal] Inhabiting faeces as some protozoa.

copula (kōp ūlā) *n*. [L. *copula*, bond.] A ridge in development of the tongue, formed by union of ventral ends of second and third arches basihyal or as interglossum in certain reptiles; any bridging or connecting structure.

copulari m (kōpŭlā rīm) *n*. [L. *copula*, bond.] A cyst formed around two associated gametocytes, in gregarines.

copulation (kōpŭlā shōn) *n*. [L. *copula* bond.] Sexual union; union in protozoa, complete fusion of two individuals conjugation as in yeasts.

coracoid (kōr'ākōid) *a*. [Gk. *korax* crow *eidos* form] *Appl* or part bone or part of the pectoral girdle between scapula and sternum *appl* ligament which stretches over the suprascapular notch.

coracoid process, — the rudimentary coracoid element fused to the scapula in most mammals.

coralliferous (kōrālīf'ērūs) *a*. [Gk. *korallion* coral L. *ferre* to bear] Coral-forming containing coral.

corallin e (kōr'ālīn) [Gk. *korallion* coral.] Resembling coral *appl* Hydrosoma and Polyzoa composed of coral *appl* certain Algae *appl* a Pliocene crag or deposit containing fossil Polyzoa and Mollusca.

corallit (kōr ālit) *n*. [Gk. *korallion* coral.] Cup of single polyp of coral.

coralloid (kōr'ālōid) *a*. [Gk. *korallion* coral *eidos* form.] Resembling or branching like coral *appl* gleba roots, etc.

corallum (kōrāl'ūm) *n.* [Gk. *korallōn* coral.] Skeleton of compound coral.

corbiculum (kōrbīk'ūlūm) *n.* [L. *dim.* of *corbis* basket.] Fringe of hair on insect tibia the pollen-collecting apparatus of a bee. *Pls.* corbicula.

corbula (kōrbūllā) *n.* [L. *corbis* basket.] The phyllactocarp of *Aglaophenus*, etc. a stem with alternate branches rising upwards and forming pod-like structure.

cord (kōrd) *n.* [Gk. *chorde* cord.] Any cord-like structure, as spinal cord, spermatic cord.

cordate (kōr'dāt) *a.* [L. *cor* heart.] Heart-shaped cordiform.

cordiform tendon, —the central pneurosis of the diaphragm.

cordylus (kōrd'ylus) *n.* [Gk. *chorde* swelling.] An interstaccular exumbra structure with core of vacuolated cells and flattened ectoderm.

coremata (kōr'mātā) *n. pl.* [Gk. *koraios*, broom.] Paired sacs bearing hairs, on membrane between seventh and eighth abdominal segments, accessory copulatory organ in moths.

coremiform (kōr'mīfōrm) *a.* [Gk. *koraios* broom L. *forma*, shape.] Formed like broom or sheaf.

coresium (kōr'īfūm) *n.* [Gk. *koraios*, broom.] A sheaf-like aggregation of conidiophores, or of hyphae.

coriaceous (kōr'ī shūs) *a.* [L. *corium*, leather.] Leathery *appt.* leaves.

corium (kōr'īūm) *n.* [L. *corium* leather.] The middle division of an elytron deeper-seated layer of the skin consisting of vascular connective tissue cutis vera derma.

cork (kōrk) *n.* [Sp. *alcornoque* cork.] A tissue derived usually from outer layer of cortex in woody plants.

cork-cambium, —phellogen, *g.s.* cork (kōrm) corneus (kōr'nūs) *n.* [Gk. *koraios* trunk.] An enlarged solid subterranean stem, rounded in shape, composed of two more

internodes and covered externally by few thin membranous scales or cataphyllary leaves.

cornel (kōr'mēl) *n.* [Gk. *koraios* trunk.] A secondary corn produced by an old corn.

cornicl m (kōrnīkl'ūm) *n.* [Gk. *koraios* trunk *idion* *dim.*] An aggregation of individuals in a siphonophore borne on the coenosarc and capable of liberation therefrom.

cornicoid (kōr'mōid) *a.* [Gk. *koraios* trunk *oides* form.] Like a corn.

corniophylogeny (kōr'mōfīlōj'ēnī) *n.* [Gk. *koraios* trunk *phyle* tribe *genesis* offspring.] Development of families or races.

corniophyte (kōr'mōfīt) *n.* [Gk. *koraios* trunk *phylon* plant.] A plant which possesses stem and root. *Opp.* thallophyte.

cornous (kōr'nūs) *a.* [Gk. *koraios* trunk.] Corn-producing.

cornea (kōr'ēā) *n.* [L. *corneus* horny.] The transparent covering on anterior surface [eyeball] outer transparent part of each element of compound eye.

corneagen (kōr'nēj'ēn) *a.* [L. *cornu* horn Gk. *genesis* producing.] Corns producing *appt.* cells immediately below cuticle, which secrete cuticular lens and are renewed on ecdysis.

corneal (kōr'ēāl) *a.* [L. *corneus* horny.] Pert. the cornea.

corneoscut (kōr'nēskūt) *n.* [L. *corneus* horny *scutum* shield.] An epidermal scale.

corneous (kōr'nēūs) *a.* [L. *corneus* horny.] Horny *appt.* sheath covering ball of lards.

cornic (kōr'nīk) *n.* [L. *dim.* of *cornu* horn.] A wax-secreting organ *f.aphids* corniculum, *g.s.*

corniculate (kōrnīk'ūlāt) *a.* [L. *dim.* of *cornu* horn.] Having small horns.

corniculate cartilages, —two small conical elastic cartilages articulating with apices of arytacnoids Santorini cartilages.

corniculum (kórnik úlám) *n* [L. *dim.* of *cornu* horn.] A small horn or horn-like process.

cornification (kór'nífiká shún) *n*. [L. *cornu* horn *facere* to mak] Formation of outer horny layer of epidermis.

cornua (kór'núá) *n* *plu.* [L. *cornu* horn.] Horns horn-like prolongations *appl* bones nerve trunks, cavities etc.; the dorsal lateral and ventral columns of grey substance in spinal cord. *Sing* cornu.

cornucopia (kór'núkóp'ia) *n* [L. *cornu* horn *copia* plenty] The horizontal portion of taenia of fourth ventricle.

cornute (kór'nút) *a*. [L. *cornutus* horned.] With horn-like processes.

corolla (kór'ól'á) *n*. [L. *corolla* small crown.] The petals of flower

corollaceous (kór'ól'áshítá) *a*. [L. *corolla* crown.] *Part* a corolla.

corolliferous (kór'ól'íf'érús) *a*. [L. *corolla*, small crown *ferre* to bear] Having corolla.

corona (kór'óná) *n*. [L. *corona* crown.] A cup-shaped body formed by union of scales on perianth leaves, as in daffodil theca and arms of crown echinoid test excepting pical and antapical plates ciliated disc or circula band of certain animals head or upper portion of any structure.

corona radiata,—layer of cells surrounding mammalian egg fibres of internal capsule of brain.

coronal (kór'ónál) *a*. [L. *corona* crown.] *Part* corona *appl* suture between frontal and parietal bones situated in the coronal utural plane *appl* later roots of *gracilis*, *appl* seminal.

coronary (kór'ónárí) *a*. [L. *corona* crown.] Crown-shaped or crown-like encircling *appl* arteries bones, sinus, ligaments, plexus vein.

coronary arteries,—arteries supplying tissue of heart labial arteries.

coronary bone —a small conical bone in mandible of reptiles small pecten bone of horse.

coronary sinus,—channel receiving

most cardiac veins and opening into right uricle.

coronate (kór'ónát) *a* [L. *corona*, crown.] Having corona having a row of tubercles encircling a structure, = mounted on whorls of spiral shells.

coro ál (kór'óáét) *n*. [L. *corona*, crown.] The burr of an antler

coro old (kór'ó'old) *n* [Gk. *koronís* crook beaked *oides* form] Shaped like a beak; *appl* processes. [L. *corona*, crown.] = Coronary bone of reptiles.

coronula (kór'ónúá) *n* [*Dim.* of L. *corona*, crown.] A group of cells forming crown on the oosphere as in Charophyta.

corpora (kór'póra) *n* *plu* [L. *corpus* body] Bodies. *See* corpus.

corpora adiposa,—fat-bodies, *q.v.*

corpora albicantia,—white bodies or scars formed in ovarian follicle after disintegration of luteal cells

corpora mamillaria, ganglia below posterior part of third ventricle.

corpora allata,—paired ovoid whitish endocrine glands in insects.

corpora amylacea,—brain sand.

corpora bigemina,—the optic lobes of vertebrate brain corresponding to the superior colliculi of corpora quadrigemina of mammals.

corpora cardacea,—neuroglandular bodies between cerebral ganglia and corpora allata, in some insects.

corpora cavernosa,—erectile masses of tissue forming anterior part of body of penis erectile tissue of chitona.

corpora mamillaria,—two white bodies enclosing grey matter in hypothalamus, beneath floor of third ventricle corpora albicantia.

corpora quadrigemina,—four rounded eminences which form dorsal part of mesencephalon.

corpus (kór'pús) *n* [L. *corpus* body] Body any fairly homogeneous structure which forms part of an organ *plu* corpora

corpus albicans,—white tissue replacing corpus luteum in non-pregnancy

**corpus callosum**,—the broad transverse band of white substance connecting the cerebral hemispheres.

**corpus fibrosum**,—fibrous tissue remaining after disintegration of corpus luteum.

**corpus g. iculatum**,—geniculate body *g.o*

**corpus ha. morrhagicum**,—body developed from ruptured Graafian follicle around blood clot, and later developing into corpus luteum.

**corpus int. am.**,—the glandular body developed from a Graafian follicle after extrusion of ovum yellow body

**corpus pongiosum**,—mass of erectile tissue forming posterior wall of penis corpus cavernosum urethrae.

**corpus sternal**,—sternabrae fused into single mesosternal bone the gladiolus.

**corpus striatum**,—a mass of grey matter containing white nerve fibres and consisting of the caudate nucleus which projects into the lateral ventricle, and of the fascicular nucleus.

**corpuscle** (kôr'púsl kôr'púsl) *n.* [*L. corpusculum* small body] A protoplasmic cell floating freely in a fluid or embedded in matrix any minute particle, as in a cell.

**correlation** (kôr'fêl shún) *n.* [*L. L. correlatio* relationship.] Mutual relationship proportional growth interdependence of characters, particularly of quantitative characters measured by correlation coefficient which is plus or minus one if characters are exactly inter-related, and zero if entirely unrelated combination of nervous impulses in sensory centres, resulting in adaptive reactions.

**correlator** (kôr'fêlâtôr) *n.* [*L. L. correlatio* relationship] A diffusible substance correlating activities of coleoptile tip and hypocotyl axis, *g.o*

**corrugator** (kôr'bugâtôr) [*L. cum* together *rugere* to wrinkle.]

Wrinkled *r* wrinkling *g.o*  
muscles.

**cortex** (kôr'têks) *n.* [*L. cortex* bark.]

The extrastelar fundamental tissue of the sporophyte outer or more superficial part of an organ.

**cortical** (kôr'tikál) *a.* [*L. cortex* bark.] *Part* the cortex.

**corticate** (kôr'tikât) *a.* [*L. cortex* bark.] Having a special outer covering

**corticiferous** (kôr'tisf'êrô) *a.* [*L. cortex* bark; *ferre* to carry] Forming or having a bark-like cortex.

**corticulous** (kôr'tik úls) *a.* [*L. cortex* bark *calere* to inhabit.] Inhabiting or growing on bark.

**corticosterone**,—the active constituent of adrenal cortical hormone  $C_{21}H_{36}O$

**corticostriate** (kôr'tikst'riât) *a.* [*L. cortex* bark *stria*, channel.] *Appl.* fibres which join corpus striatum to cerebral cortex

**corticotrophic**, **corticotropic**,—adrenocorticotrophic, *g.o*

**cortin** (kôr'tin) *n.* [*L. cortex* bark.] Adrenal cortex extract containing cortical hormones.

**cortina** (kôr'tínâ) *n.* [*L. cortina* curtain.] The veil in some agarics.

**cortinate** (kôr'tinât) *a.* [*L. cortina*, curtain.] Having a veilum of a cobweb-like texture.

**Corti's organ** [*A Corti* Italian histologist]. The organon spirale, on inner portion of membrana basilaris of ear

**Corti's rods**,—double row of reeling rods based on basilar membrane and forming the spiral tunnel of Corti.

**coruscation** (kôr'uskâ shôn) *n.* [*L. coruscate* flash.] Twinkle, rapid fluctuation in flash or oscillation in light emission, as of fire-flies.

**corymb** (kôr'imb) *n.* [*Gk. korymbos* cluster of flowers] A raceme with lower pedicels elongated so that the top is nearly flat.

**corymbose** (kôr'im'bô) *a.* [*Gk. korymbos* cluster of flowers.] *Part* or like corymb arranged in a corymb corymbose.



coamine (kōs mīn) *n.* [Gk. *kosmias* regular] The outer layer of dentine-like material in costoid and ganoid scales.

cosmoid (kōs moid) *n.* [Gk. *kosmias* regular *eidos* form.] Having an outer periodically resorbed layer of coamine *appl* dermal bones, scales, and lepidotrichia in *Crossopterygii*. cosmopolitan (kōsmopōl'itān) *os-* *opolite* (kōsmōpōl'it) *n.* [Gk. *kosmos* world *polites* citizen.] World-wide in distribution.

costa (kōs'tā) *n.* [L. *costa*, rib] A rib anything rib-like in shape, as a ridge on shell coral, etc. anterior vein, *r* margin, *f* insect wing comb-rib or swimming plate of *Ctenophora* structure *i* base of undulating membran in *Trichomonadidae*. *Plu.* costae.

costaeform (kōs'tēfōrm) *n.* [L. *costa*, rib *forma* shape.] Rib-like *appl* unbranched parallel leaf-veins. costal (kōs'tāl) *n.* [L. *costa* rib.] *Part* ribs or rib-like structure *appl* bony shields *f* *Chełonia* *part* costa of insect wing *part* primary brachial series in *Crimoeds* *part* main rib

costalia (kōs'tāl'ia) *n. pl.* [L. *costa*, rib.] The supporting plates theca of *Cladocera*.

costate (kōs'tēt) *n.* [L. *costa*, rib] With one or more longitudinal ribs with ridges or costa

coterminal (kōtēr'mīnāl) *n.* [L. *com* with *terminatus* end.] Of similar distribution bordering on. cotyledon (kōtīl'ē'dōn) *n.* [Gk. *kotyle* cup.] The seed-leaf primary or first leaf of an embryonic sporophyte a patch of villi on mammalian placenta.

cotyledonary (kōtīl'ē'dōnārī) *n.* [Gk. *kotyle* cup.] *Part* cotyledons with villi grouped in cotyledons, *appl* placenta.

cotylold (kōt'fōld) [Gk. *kotyl* cup *eidos* form] C p-shaped *part* the acetabular cavity

cotyllophorous (kōtīlōf'ōrūs) *n.* [Gk. *kotyle* cup *phoros* to bear] With a cotyledonary placenta.

cotype (kōtīp) *n.* [L. *com* with *typus* image.] An additional type specimen frequently collected in same place at same time, or specimen from a description of which, along with others, the type is defined syntype.

covariati *n* (kō vārīā shūn) *n.* [L. *com* with *varius* diverse.] Correlation, *q.v.*

cover scales,—small scales arranged spirally and developed directly on the axis of a cone of *Coniferae* bract scales.

covert (kōv'ēt) *n.* [F. *couvrir* to cover] *Appl* feathers covering bases of quills in birds.

cowled (kōwīd) *n.* [L. *cauculus* hood.] Furnished with or shaped like a hood.

Cowper's glands [W. Cowper English surgeon]. Bulbo-urethral glands *q.v.*

coxa (kōk'sā) *n.* [L. *coxa* hip.] Proximal joint of leg of an insect or arachnid.

coxal (kōk'sāl) [L. *coxa* hip.] *Part* the coxa *appl* glands *part* the hip

coxite (kōk'sīt) *n.* [L. *ars* hip.] One of paired lateral plates in contiguity with insect sternum; limb base bearing stylus in *Thysanura*.

coxopleurite—catapleurite, *q.v.*

coxopodit (kōk'sōpōdīt) *n.* [L. *coxa* hip Gk. *pus* foot.] The proximal part of protopodite of crustacean limb coxa of spiders.

coxosternum (kōk'sōtēr'nūm) *n.* [L. *coxa* hip *sternum* breast-bone.] Plate formed by fusion of coxites and sternum vinculum *i* *Lepidoptera*.

crampon (krām pōn) *n.* [O H G. *crampf* crooked.] An aerial root, as in ivy

cranial (krā'nāl) *n.* [Gk. *kranion* skull] *Part* skull or that part which encloses the brain *appl* bones *f* osseae *f* nerves, muscles, blood-vessel etc.

craniat (krā'nāt) *n.* [Gk. *kranion* skull.] Having skull.

cranium (krānīd'ium) *n.* [Gk. *kranion* skull *idion* dim.]  
Glabella together with fixed genae,  
in trilobites.

craniohemal (krā nīhē māl) *n.* [Gk. *kranion*, skull; *haima* blood.]  
*Appl* anterior lower portion of  
sclerotome.

cranio neural (krā nīō nāl) *n.* [Gk. *kranion* skull *neuron* nerve.]  
*Appl* anterior upper portion of  
sclerotome.

craniology (krā nīō'ōjī) *n.* [Gk. *kranion* skull *logos* discourse.]  
The study of the skull.

cranialometry (krā'biōm ētrī) *n.* [Gk. *kranion*, skull *metron* measure.]  
The science of the measurement of  
skulls.

craniosacral (krā nīōsāk'rāl) *n.* [Gk. *kranion* skull *L. sacer* sacred.]  
*Part* skull and sacrum *appl*  
nerves, th. parasympathetic sys-  
tem.

cranium (krā'nīūm) *n.* [Gk. *kranion*  
*L. cranium*, skull.] The skull of  
any craniate, or more particularly  
that part enclosing the brain.

craspedodermous (krās'pedōd'rō-  
mūs) *n.* [Gk. *kraspedon*, edge  
*derma*, to run.] With nerves run-  
ning directly from mid-rib to  
margin.

craspedote (krās'pēdōt) *n.* [Gk. *kraspedon* edge.] Having a  
velum.

craspedum (krās'pēdūm) *n.* [Gk. *kraspedon* edge.] A mesenteric  
filament of sea-anemones.

crassula (krās'tūl) *n.* [*L. crassus*  
thick.] Thickened bar on middle  
lamella between two bordered pits  
in tracheids of wood of conifers  
bar of Sando. *Pfm.* crassulae.

craticular (krātīk'ulār) *n.* [*L. crati-*  
*cula* gridiron.] Crate-like *appl*  
stage in life-history of diatom  
where new valves are formed before  
the old are lost.

creatin (krē'ātin) *n.* [Gk. *kras*  
flesh.] A nitrogenous substance  
found in muscles, brain and blood  
of vertebrates;  $C_4H_9O_3N_3$

creatinine (krē'ātinīn) *n.* [Gk. *kras*

flesh.] A katabolic product in  
muscle and other tissues, excreted  
in urine  $C_4H_9ON_3$ .

cremaster (krēmās'tēr) *n.* [Gk. *krēmastēs* hang] A thin muscle  
along the spermatic cord stout  
terminal abdominal spine in sub-  
terranean insect pupae the anal  
hooks for suspension pupae.

cremocarp (krēm'ōkār) *n.* [Gk. *krēmastēs*, to hang *herpes*  
fruit.] An inferior dry indehiscent  
bilocular two-seeded fruit.

crena (krē'nā) *n.* [*L. crenas* notch.]  
Notch in a crenate margin as of  
leaf cleft, as anal cleft deep  
groove as longitudinal sulcus of  
heart.

cr not (krē'nāt) *n.* [*L. crenas*, notch.]  
With scalloped margin.

crenation (krēnāl shn) *n.* [*L. cre-*  
*matus* notched.] A scalloped mar-  
gin, or rounded tooth, as of  
leaf; crenature notched or  
wrinkled appearance, as of ery-  
throcytes exposed to hypertonic  
solutions.

crenulat (krēnālīt) *n.* [*Dim.* of  
*L. crenas*, notch.] With margins  
minutely crenate crenelated, cren-  
ulated.

crisp (krē'ps) *n.* [Gk. *krephē*  
foundation.] The fundamental  
spicule by deposition of silica upon  
which desma is formed.

crepitation (krēpītālshn) *n.* [*L.*  
*crepitare* to crackle.] In insects  
the discharge of fluid with an  
explosive sound.

crepuscular (krēpūs'kūlār) *n.* [*L.*  
*crepusculum* dusk.] *Part.* dusk;  
flying before sunrise or in twilight.

crescant (krēs'ēnt) *n.* [*L. crescere*  
to grow] A crescentic struc-  
ture.

crecentiform (krēn'ēnfōrm) *n.* [*L.*  
*crescere* to grow *forma*, shape.]  
Crescent-shaped crescentic *appl*  
mouth of Sipunculoides.

crescents of Glanuzzi, — small  
crescent-shaped bodies of the  
salivary glands demilunes of  
Heldenbahn.

crest (krĕst) *n.* [*L. crista* crest] A ridge on a bone a fleshy longitudinal ridge as in newts crown or feather tuft on head of birds.

Cretaceous (krĕtā shās) *a.* [*L. creta* chalk.] *Appl* and *part.*, the last period of the Mesozoic era.

cribellum (krĭbĕl'um) *n.* [*L. dum* of *cribrum* sieve.] A plate perforated by openings of silk ducts in certain spiders.

cribriform (krĭb rĭfŏrm) *a.* [*L. cribrum* sieve *forma* shape.] Sieve-like.

cribriform organ, — folded membrane carrying papillae in interradial angles of certain starfishes.

cribriform plate, — the portion of ethmoid, or of mesethmoid perforated by many foramina for exit of olfactory nerves lamina cribrrosa.

cricoid (krĭ'koid) *a.* [*Gk. krĭkous* ring *eidos* form.] Ring-like *appl* cartilage in larynx, articulating with thyroid and arytaenoid cartilages *appl* placenta lacking villi on central part of disc as in certain Edentata.

crinoid (krĭn'oid) *n.* [*L. crinus* hair] Network formed in cytoplasm by basophil substances reacting to vital staining

crinoid (krĭ'kōn) *a.* [*Gk. krĭs* ram *kōnos* cone.] With uncoiled spiral shaped like ram horn *appl* shell of certain ammonites.

crissal (krĭs'əl) *a.* [*L. crissare* to move haunches.] *Part* the crissum

criss-cross, — *appl* inheritance when offspring resemble the parent of the opposite sex.

criss m (krĭs'um) *n.* [*L. crissare* to move haunches.] The circumcloacal region of bird vent feathers lower tail-coverts.

crista (krĭs'tā) *n.* [*L. crista* crest.] A crest or ridge projection from ectoloph into median valley in lophodont molars a fine membrane attached to body of certain spermatophytes ligule of palm-leaves.

crista acustica, — thickening covered with neuroepithelium f mem-

bran lining ampullae f semicircular canals a chordotonal structure in Orthoptera.

crista galli, — anterior median process of cribriform plate.

crista urethralis, — verumontanum, *q.v.*

cristate (krĭs'tāt) *a.* [*L. cristatus* crested.] Crested cristiform, shaped like a crest.

crochet (krōshā') *n.* [*F. crochet* small hook.] The projection of the protoloph in lophodont molars balancer in larval salamanders a larval locomotory hook in insects.

crop (krōp) *n.* [*M.E. crafpe* craw] Sac-like dilatation of gullet of bird a similar structure in alimentary canal of insect or worm *ingraves*.

crozier (krō'shye) *n.* [*M.E. croce* crook.] Circinate young frond of fern hook f med by terminal cells of aecogenous hyphae; flat spiral shell, as of *Spirula*.

cross (krōs) *n.* [*M.E. crows* cross.] An organism produced by mating parents f different breeds. *n* T hybridise.

crossing over — interchange of corresponding chromosome segments by homologous pairs of chromosomes during maturation.

cross-over — a chromatid formed as result of crossing-over

crotophite (krōt'afĭt) *n.* [*Gk. krōtophites* side of forehead.] The temporal fossa

crotchet (krōch'it) *n.* [*F. crochet* small hook.] A curved chaeta, notched at the end *oculus* claws, in spiders.

crown (krown) *n.* [*L. corona* crown] The exposed part f tooth especially the grinding surface distal part of antler crest head cup and arms of crinoid corona *q.v.* leafy upper part of tree

crozier — crozier *q.v.*

cruc (krōo'kru'it) *n.* [*L. crux* cross.] Cruciform with leaves or petals in form of cross  $\lambda$ -shaped or  $\tau$ -shaped *appl* muscles, ligament crucial.

cruciform (kroos'förm) *a.* [L. *crux* cross *forma* shape.] Arranged like the points of a cross *appl.* division, promitosis in Plasmodiophorales.

crucor (kroo'ör) *n.* [L. *crux* blood.] The clots in coagulated blood.

crucrin (kroo'ürin) *n.* [L. *crux* blood.] Haemoglobin.

crura (kroo'ri) *n. plu.* [L. *crura* legs.] The shanks leg-like or columnar structures lumbar part of diaphragm muscle fibres proximal processes of corpora cavernosa penis; branches of uros and stapes pillars of subcutaneous hygurnal ring posterior pillars of fornx crura cerebri, *g.s.*

crura cerebri,—the cerebral peduncles, two cylindrical masses forming the ventrolateral portion of mid-brain.

crural (kroo'äl) *a.* [L. *crus* leg.] *Part.* the thigh.

crureus (kroo'üts) *n.* [L. *crus* leg.] Vastus intermedius muscle of thigh

crus (krüs) *n.* [L. *crus* leg.] The shank any leg-like organ. *Plu.* crura.

crusta (krüs'tä) *n.* [L. *crusta*, shell.] Ventral part or base or pes of cerebral peduncles cement layer of teeth, crusta petrosa.

crustaceous (krüst'äl shüs) *a.* [L. *crusta*, shell.] With crustacean characteristics crustace *g.s.*

crustus (krüs'tüs) *a.* [L. *crusta*, shell.] Forming crusts on substratum, *appl.* Eichena.

cryophil (krí'öfil) *a.* [Gk. *kryos* chill *philos*, to love.] Thriving at low temperature cryophilic.

cryptoplankton (krí'öplängk'tön) *n.* [Gk. *kryos* frost *planktos* wandering.] Glacial and polar plankton algal communities thriving on snow

cryoscopy (krí'ösköp'ík) *a.* [Gk. *kryos* frost *skopein*, to view] *Appl.* method of determining osmotic pressure, using freezing point depression.

crypt (krípt) [Gk. *kryptos* hidden.]

A simple glandular tube or cavity put of stoma depression in uterine mucous membrane.

cryptic (kríp'tík) *a.* [Gk. *kryptos* hidden.] *Appl.* protective coloration facilitating concealment *appl.* polymorphism due to presence of recessive genes *appl.* species extremely similar as to external appearance but which do not normally interbreed.

cryptocarp (kríp'tóikarp) *n.* [Gk. *kryptos* hidden *karpos* fruit.] A fruit-like structure, the sporophyte phase in red algae

cryptogam (kríp'tógám) *n.* [Gk. *kryptos* hidden *gamos* union.] A plant without apparent reproductive organs a spore-plant of phanerogam.

cryptogen (kríp'tójén) *a.* [Gk. *kryptos* hidden *genesis* origin.] Of unknown descent having an indeterminate phylogeny

cryptohapl mitosis (kríp'tóhap'tómító'sis) *n.* [Gk. *kryptos* hidden *haplos* simple *mitos* thread.] Type of cell-division in some flagellates where chromatin divides into two masses which pass to opposite poles without sporeme formation.

cryptomer (kríp'tómer) *n.* [Gk. *kryptos* hidden *meros* part.] A hidden recessive hereditary factor

cryptomitosis (kríp'tómító'sis) *n.* [Gk. *kryptos* hidden *mitos* thread.] Division of unicellular organisms, in which chromatin assembles in the equatorial region without apparent chromosome formation.

cryptoneurous (kríp'tóneurós) *a.* [Gk. *kryptos* hidden; *neuron*, nerve.] With no definite or distinct nervous system.

cryptophyte (kríp'tófit) *n.* [Gk. *kryptos* hidden *phyton* plant.] A plant perennating by means of rhizomes, corms, or bulbs under ground, or under water buds.

cytoplasm (kríp'toplám) *n.* [Gk. *kryptos* hidden *plasma* form.] The non-granular portion of cytoplasm.

cryptoptile (krip tōil ptil) *n.* [Gk. *kryptos* hidden *ptilon* feather] A feather filament developed from papilla.

cryptorchid (krip tōr'kid) *n.* [Gk. *kryptos* hidden *orchis* testis.] Having testes abdominal in position.

cryptorhetic (krip tōrēt'ik) *n.* [Gk. *kryptos* hidden *rhain* to flow] Secreting internally endocrine.

cryptosolenial (krip tōsōlē nāl) *n.* [Gk. *kryptos* hidden *solen*, channel.] *Appl* region of attachment of Malpighian vessels to hind-gut in certain Coleoptera.

cryptostomata (krip tōstōm'atā) *n. pl.* [Gk. *kryptos* hidden *stoma* mouth.] Non-sexual conceptacles in Fucaceae.

cryptozoic (krip tōsō'ik) *n.* [Gk. *kryptos* hidden *zōon* animal.] *Appl* fauna dwelling in darkness, or under stones, bark, etc.

cryptozoite (krip tōsō'it) *n.* [Gk. *kryptos* hidden *zōon*, animal.] Stage of sporozoite when living in tissues before entering blood.

crypts of Lieber kühn,—see Lieber kühn's crypts.

crystallin (kris'tālin) *n.* [Gk. *krysallos* ice.] A globulin which is the principal constituent of lens of eye.

crystalline (kris'tālin) *n.* [Gk. *krysallos* crystalline.] Transparent *appl.* various structures.

crystalline style,—a proteid hyaline rod with amylolytic function in alimentary canal of some molluscs.

crystalloid (kris'tāloid) *n.* [Gk. *krysallos* ice *eidos* form.] A substance which in solution readily diffuses through an animal membrane *opp.* colloid a protein crystal found in certain plant cells.

crystal-sand,—a deposit of minute crystals of calcium oxalate as in Solanaceae.

crystal-spore—an isospore containing a crystal of Radoliana.

ctenophyte (tēn'ōfit, ktēn'ōfit) *n.* [Gk. *ktēnēin*, to kill *phytos* plant.] A parasitic plant, of fungus, which destroys its host.

ctene (tēn ktēn) *n.* [Gk. *ktēn* comb.] The swimming plates of ctenophores.

ctenidium (tēn'di'ŏm ktēn'di'ŏm) *n.* [Gk. *ktēn* comb *idion* dim.] The respiratory apparatus in molluscs, feather-like or comb-like in appearance a row of spines forming comb in some insects.

ctenocyst (tēn'ōsist, ktēn'ōsist) *n.* [Gk. *ktēn* comb *kystis* bladder] Aboral sense organ of Ctenophora.

ctenoid (tēn'oid, ktēn'oid) *n.* [Gk. *ktēn* comb *eidos* form.] With comb-like margin, as scales.

cte ophoral (tēn'ō'ŏrāl, ktēn'ō'ŏrāl) *n.* [Gk. *ktēn* comb; *phorion*, to bear] S pplied with swimming plates.

ctology (tēn'ō'jī, ktē) *n.* [Gk. *ktēn* acquired *logos* discourse.] Aspect of biology concerned with acquired characters.

ctosome (tē'tōsōm, ktē) *n.* [Gk. *ktēn* acquired *soma*, body] A supernumerary chromosome associated with sex chromosome during meiosis.

cubical (kū'bikāl) *n.* [L. *cubus* cube.] *Appl* cells as long as broad.

cubital (kū'bītāl) *n.* [L. *cubitalis* of elbow] *Part* the ulna or cubitus. *n.* A secondary wing-quill connected with the ulna.

cubitus (kū'bītūs) *n.* [L. *cubitus* elbow] The ulna, forearm primary vein in an insect wing.

cuboid (kū'bōid) *n.* [Gk. *kuboides* cube-like.] Nearly cubic in shape *n.* Outermost of distal tarsal bones.

cuboidal (kū'bōid'āl) *n.* [Gk. *kuboides* cube-like] *Part* the cuboid.

cucullate (kū'kulāt kūkol'ār) *n.* [L. *cucullus* hood] With hood like sepals or petals with prothorax hood-shaped.

cucullus (kūkol'ūs) *n.* [L. *cucullus* hood.] A hood-shaped structure upper part of harpe in Lepidoptera.

culler (kw'ēr) *n.* [F. *culler* spoon.] Spoon-like terminal portion of male insect clasper.

cuirass (kwírá) *n* [*F cuirasse* leather jacket.] Bony plates or scales arranged like a cuirass a lorica, *g.v*

culm (kúlm) *n* [*L. culmus* stalk.] The stem of grasses and sedges.

culmen (kúl'mén) *n*. [*L. culmen* summit.] Median longitudinal ridge of a bird beak anterior raised part of rostrum.

cutellus (kútel'ús) *n*. [*L. cutellus* little knife.] A sharp knife-like organ one of mouth-parts of certain blood-sucking flies.

culture (kúl'túr) *n*. [*L. cultura* colere t. till.] The cultivation of micro-organisms or tissues in prepared media.

cumelose (kú mēlós) *n*. [*L. cumulus* heap.] *Appl.* deposits consisting chiefly of plant remains, *g post.*

cumulus (kú mēlús) *n*. [*L. cumulus* heap.] The mass of epithelial cells bulging into cavity of an ovarian follicle and in which ovum is embedded cumulus oophorus, discus proterus.

cuneate (kú'nēát) *n*. [*L. cuneatus* wedge-shaped.] Wedge-shaped; *appl.* leaves with broad abruptly-pointed apex and tapering to the base; *appl.* a fasciculus and tubercle formed by grey nucleus at posterior end of rhomboid fossa of medulla oblongata.

cuneiform (kú'nēí'fórm) *n*. [*L. cuneus* wedge *forma*, shape.] Wedge-shaped *appl.* distal tarsal bones *appl.* carpal bones, or triquetrum *appl.* two small cartilages of larynx.

cuneus (kú'ús) *n*. [*L. cuneus* wedge.] A division of elytron of certain insects wedge-shaped area of the occipital lobe between calcarine fissure and medial part of parieto-occipital fissure.

cup (kúp) *n*. [*A.S. cype* cup.] Any structure resembling cup.

cupula (kúp'úlá) *n*. [*L. cupula* little tub.] The bony apex of cochlea the part of pterum over the pax of lung cupule *g.v*

cupulate (kúp'úlát) *n*. [*L. cupula*

little tub.] Cup-shaped *appl.* certain acedidia.

cupule (kúp'úl) *n*. [*L. cupula* little t. b.] The involucre of female flower of oak, etc. the gemma-bearing cup of Marchantia a small sucker of various animals.

curvilinear (kúr'víné'riál) *n* [*L. curvus* curve *series* row] *Appl.* phyllotaxis in which divergence is such that orthostichies themselves are slightly twisted spirally.

cushion (kúsh'ín) *n* [*M.E. cūschon* cushion.] The central thick region in prothallus of fern *appl.* habitus of many plants, as in certain alpine species tortu tuberos. prominence behind pharyngeal opening of Eostachian tube tubercle or elevation of laryngeal surface of epiglottis embryonic endocardial thickening of wall of atrial canal.

cusp (kúp) *n*. [*L. cuspis* point.] A prominence as on teeth sharp point.

cuspidat (kús'pidát) *n*. [*L. cuspis* sword to make pointed.] Terminating in a point *appl.* leaves teeth.

cutaneous (kú'té'néús) *n*. [*L. cutis* skin.] *Part* the skin.

cuticle (kú'tík'l) *n*. [*L. cutis* skin.] An outer skin or pellicle; the epidermis cuticula.

cuticular (kú'tík'úlar) *n*. [*L. cutis* skin] *Part* the cuticle or external integument; *appl.* transpiration through the cuticle.

cuticularisation (kú'tík'úlarízé'ábón) *n*. [*L. abas* of *cutis* skin.] Cutinisation in external layers of epidermal cells.

cutin (kú'tín) *n*. [*L. cutis* skin.] A substance allied to cellulose found in external layers of thickened epidermal cells.

cutinisation (kú'tínízé'ábón) *n*. [*L. cutis* skin.] The deposition of cutin in cell-wall thereby forming cuticle.

cutis (kú'tis) *n* [*L. cutis* skin] The corium, or deeper layer of the skin.

cutocellulose (kú'tósé'l'úlos) *n* [*L. cutis* skin *cellula*, small cell.] Cellulose with cutin, as in plant epidermis.

cutose (kú tōs) *n.* [L. *cutis* skin.]  
 C tin *qv*  
 Cuvier ducts of [G.L.C.F.D. *Cuvier*  
 French comparative anatomist].  
 Short veins opening into sinus  
 venosus, and formed by union of  
 anterior and posterior cardinal veins.  
 Cuvierian organs.—glandular tubes  
 extending from cloaca of holo-  
 thurians.  
 cyanic (sīn'ik) *a.* [Gk. *kyanos* dark  
 blue.] Blue, bluish *appl* flowers,  
 birds eggs.  
 cyanin (sī'anin) *n.* [Gk. *kyanos* corn-  
 flower.] The bl pigment or  
 anthocyanin of the cornflower  
 cyanog noia (sī'ānōjēn'ōia) *n.* [Gk.  
*kyanos* blue *genetis* origin.] The  
 elaboration of hydrocyanic acid  
 prussic acid as in certain plants.  
 cyan phil (sīn'ōfil) *a.* [Gk. *kyanos*  
 blue *phileo* to love.] With  
 special affinity for blue or green  
 stains *appl* cell structure.  
 cyanophycin (sī'ānōfī'n) *n.* [Gk.  
*kyanos* blue *phytos* seaweed.]  
 Protein reserve forming granules in  
 peripheral region of cells in blue-  
 green algae *β* granules.  
 cyanophyll (sīn'ōfil) *n.* [Gk. *kyanos*  
 blue *phylon* leaf.] A bluish-  
 green colouring matter in plants.  
 cyathium (sī'āthiōm) *n.* [Gk. *ky-  
 thos* cup.] The peculiar inflores-  
 cence in Euphorbia, cup-shaped  
 involucre with stamens and stalked  
 gynoecium, each stamen and the  
 gynoecium being separate  
 flower  
 cyathoxoid (sī'āthōs'ōid) *n.* [Gk.  
*kyathos* cup *zōon* animal *eidos*  
 shape.] The primary zooid in  
 certain tunicates.  
 cyathus (sī'āthos) *n.* [Gk. *kyathos*  
 cup.] A small cup-shaped organ  
 the germa-cup of Marchantia.  
 cycle (sikl) *n.* [Gk. *kyklos* circle.]  
 The circulation of a fluid through  
 definite series of vessels recurrent  
 series of phenomena, as life cycle,  
 ovarian cycle, etc.  
 cyclic (sī'kik) *a.* [Gk. *kyklos* circle.]  
 Having parts of flower arranged in  
 whorls cyclical periodic.

cyclocolic (sī'klos'ik) *a.* [Gk.  
*kyklos* circle *kolia* intestines.]  
 With the intestine coiled in one or  
 more distinct spirals.  
 cyclogenous (siklōj'ēnōs) *a.* [Gk.  
*kyklos* circle *genesis* to produce.]  
 Exogenous *appl*, a stem growing  
 in concentric circles.  
 cyclog ny (siklōj'ēn) *n.* [Gk. *kyklos*  
 circle *genesis* generation.] Produc-  
 tion of a succession of different  
 morphological types in a life cycle.  
 cycloid (sī'kloid) *a.* [Gk. *kyklos*  
 circle *eidos* shape.] *Appl* scales  
 with evenly curved free border  
 cyclomerial (sī'kloimō'ēl) *a.* [Gk.  
*kyklos* circle *merion* constituent  
 part.] *Appl* scales growing in  
 area by apposition of marginal roots,  
 as in Palaeozoic elasmobranchs.  
 cyclomorphosis (sī'kloimōr'fōsis) *n.*  
 [Gk. *kyklos* circle *morphe*  
 form.] A cycle of changes in form  
 as seasonal changes in daphnids.  
 cyclopa (siklōpē'an) cyclopic  
 (siklōp'ik) *a.* [Gk. *kyklos* circle  
*ops* eye.] *Appl* single median eye  
 developed under certain artificial  
 conditions instead of the normal  
 pair  
 cyclosis (siklō'sis) *n.* [Gk. *kyklos*  
 whirling round.] Circulation, as of  
 protoplasm within a cell  
 cyclospemous (sī'klospēr'mōs) *a.*  
 [Gk. *kyklos* circle *spem* seed.]  
 With embryo coiled in a circle or  
 spiral  
 cyclospendylis (sī'klospēndīl'ik) *a.*  
 [Gk. *kyklos* circle *spondylis*  
 vertebra.] *Appl* centra in which  
 the internal calcareous matter is  
 confined to the middle zone.  
 cyclospendylous (sī'klospēndīlōs) *a.*  
 [Gk. *kyklos* circle *spondylis*  
 vertebra.] *Appl* vertebra formed  
 of successive concentric layers of  
 cartilage, also cyclospendylis.  
 cy sis (sī'sis) *n.* [Gk. *kystis* con-  
 ception.] Pregnancy  
 cylindrical (sīlin'drikāl) *a.* [Gk.  
*kylindros* cylinder.] *Appl* leaves  
 rolled on themselves, or to solid  
 cylinder-like leaves *appl* type of  
 silk gland in spiders & bulbiform.

**cymba** (sím'bá) *n.* [L. *cymba* boat.] Upper part of concha of ear

**cymbiform** (sím'bítórm) *a.* [L. *cymba* boat *forma*, shape] Boat shaped.

**cymbium** (símbr'óm) *n.* [Gk. *kymbeon*, small boat.] Boat-shaped tarsus of pedipalpus in certain spiders.

**cyme** (sím) *n.* [L. *cyme* young sprout.] Any determinate inflorescence.

**cymose** (sím'ós) *a.* [L. *cyme*, young sprout.] Sympodially branched *appl* inflorescence.

**cymotrichous** (kímót'ríkús, sí-) *a.* [Gk. *kyma*, wave *trichis* hair] Having wavy hair

**cynarrhodium** (sínárr'ódíóm) *cynar*

**hodon** (sínárr'ód ón) *n.* [Gk. *kyn* dog *rhodos* rose.] An etaerio with achenes placed on concave thalamus.

**cynopod us** (sínóp'ódús) *a.* [Gk. *kyn* dog *pous* foot.] With non-retractile claws.

**cyphell** (síf'él) *n.* [Gk. *kyphele*, hollow of ear] Small cavity on thallus of certain lichens.

**cyphonantes** (síf'ónót'és) *a.* [Gk. *kyphe* bent *nantes* sailor] Young free swimming larva of certain Polyzoa.

**cypsel** (síp'sél) *n.* [Gk. *kypsel* hollow vessel] An inferior becarpellary scheme, as in Compositae.

**cyst** (síst) *n.* [Gk. *kystis* bladder] The enclosing membrane round resting cell or apocyte bladder or air vesicle in certain seaweeds abnormal sac containing fluid.

**cystin** (síst'én) *n.* [Gk. *kystis* bladder] A reduction product of cystine, occurring in urinary bladder concretions.

**cystenchyma** (sísténg'kímá) *n.* [Gk. *kystis* bladder *enchyma* infusion.] A parenchyma in sponges with large vesicular cell-structure.

**cystenocytes** (síst'énót's) *n. pl.* [Gk. *kystis* bladder *cyte*, in *kystis* hollow] In sponges, collencytes which have acquired vesicular structure.

**cystic** (síst'ík) *a.* [Gk. *kystis* bladder] *Part* *cyst* *part* gall bladder *t* urinary bladder

**cysticeroid** (síst'ísér'kóid) *a.* [Gk. *kystis* bladder *heros* tall; *eidos* form.] *Appl.* the bladderworm stage of tapeworms.

**cysticercu** (síst'ísér'kós) *n.* [Gk. *kystis* bladder *heros* tall.] The larval form or bladderworm stage of certain tapeworms

**cysticol us** (síst'ík'ólús) *a.* [Gk. *kystis* bladder *L. colere* to inhabit.] Living in a cyst.

**cystid** (síst'íd) *n.* [Gk. *kystis* bladder *idion* dim.] A fossil Cystoid.

**cystidiform** (síst'ídítórm) *a.* [Gk. *kystis* bladder *idion* dim; *L. forma* form.] *Appl* clavate cells on gill margins in garica.

**cystidium** (síst'ídítóm) *n.* [Gk. *kystis* bladder *idion* dim.] A hair-like inflated cell in the hymenial layer of some fungi.

**cystine** (síst'én) *n.* [Gk. *kystis* bladder] Ammo acid found in plants, egg albumin and keratin dicystine,  $C_8H_{15}O N_2S_2$ .

**cystoarian** (síst'óárlán) *a.* [Gk. *kystis* bladder *arion* small egg] *Appl* gonads when enclosed in coelomic sacs, as in most teleosts. *Opp* gymnoarian.

**cystocarp** (síst'ókárp) *n.* [Gk. *kystis* bladder *karpos* fruit.] A cyst arising from carpogonial branch and containing spores in certain Rhodophyceae cystocarp.

**cystocyte** (síst'ót's) *n.* [Gk. *kystis* bladder *kystis* hollow] Cystenocyte, *q.v.*

**cystog us** (síst'óg'énús) *a.* [Gk. *kystis* bladder *gonos* producing] Cyst forming *appl* large nucleated cells which secrete the cyst, in cercaria.

**cystolith** (síst'ólíth) *n.* [Gk. *kystis* bladder *lithos* stone.] A mass of calcium carbonate, occasionally of silica, formed on ingrowths of epidermal cell walls in some plants vesical calculus.



**cyston** (sɪs'tɒn) *n.* [Gk. *kystis* bladder] A dactylozooid modified for excretory purposes, in *S. phophora*.

**cystospore** (sɪs'tɒspɔː) *n.* [Gk. *kystis* bladder *sporē* s seed] A carpospore *n.* a cyst containing zoospores.

**cystozooid** (sɪs'tɒzɔɪd) *n.* [Gk. *kystis* bladder *zoōn* animal *eidos* form.] The body portion of a metacystode, *opp* acanthozooid.

**cytas** (sɪ'tɪs) *n.* [Gk. *kystis* hollow] A cell lase digesting hydrolysing enzyme alexin.

**cytaster** (sɪtɪ'stɜː) *n.* [Gk. *kystis* hollow; *aster* star] A star-shaped achromatic figure consisting of attraction-sphere and aster rays *aster opp* karyaster

**cytes** (sɪtɪs) *n. pl.* [Gk. *kystis* hollow] Spermatocyte and oocyte stages of germ-cell formation auxocytes.

**cyt blast** (sɪ'tɒblɛst) *n.* [Gk. *kystis* hollow *blastos* bud.] The cell nucleus a hypothetical unit *g.s.*

**cytoblastema** (sɪ'tɒblɛstɪ'mɛ) *n.* [Gk. *kystis* hollow *blastema* growth.] The formative material from which cells were supposed to arise.

**cytoce trum** (sɪ'tɒkɛn'trɪm) *n.* [Gk. *kystis* hollow *kentron* centre.] Centrosome idiozom

**cytochrom** (sɪ'tɒkrɒm) *n.* [Gk. *kystis* hollow *chroma* colour] A chromoprotein essential for oxidation-reduction processes in plant and animal cells histohaematin myohaematin.

**cytochylem** (sɪ'tɒkɪlɛm) *n.* [Gk. *kystis* hollow *chyle* jucc.] Cyto-lymph *g.s.*

**cytociasis** (sɪ'tɒkɪsɪs) *n.* [Gk. *kystis* hollow *kinesis* summons.] The influence of a cell group or placed pon development or differentiation of neighbouring cells of organiser

**cytococcus** (sɪ'tɒkɒkəs) *n.* [Gk. *kystis* hollow *kuklos* kernel] The nucleus of fertilised egg

**cytocyat** (sɪ'tɒsɪt) *n.* [Gk. *kystis*

hollow *kystis* bladder] The envelope formed by remains of host-cell within which a protozoan parasite multiplies.

**cytode** (sɪ'tɒd) *n.* [Gk. *kystis* hollow *eidos* form.] A non nucleated protoplasmic mass.

**cytoderma** (sɪ'tɒdɜːm) *n.* [Gk. *kystis* hollow *derma* skin.] A cell-wall. **cytodiaresis** (sɪ'tɒdɪə'resɪs) *n.* [Gk. *kystis* hollow *diarresis* division.] Mitosis karyokinesis.

**cytology** (sɪ'tɒlədʒi) *n.* [Gk. *kystis* hollow *gamos* marriage] Cell-conjugation.

**cytoge sis** (sɪ'tɒjɛn tɪs) *n.* [Gk. *kystis* hollow *genesis* descent.] Development or formation of cells.

**cytoge etic** (sɪ'tɒjɛn'tɪk) *n.* [Gk. *kystis* hollow *genesis* descent] *Part* cytogenesis *part* cytogenetics *opp* map showing location of genes within chromosome

**cytogenetics** (sɪ'tɒjɛn'etɪks) *n.* [Gk. *kystis* hollow *genesis* descent.] Genetics in relation to cytology the cytological aspect of genetics.

**cytog nous** (sɪ'tɒj nɔːs) *n.* [Gk. *kystis* hollow *gamos* offspring] Producing cells *opp* lymphatic tissue.

**cyt gi lin** (sɪ'tɒgɪ'blɪ) *n.* [Gk. *kystis* hollow *L. globus* globe.] A protein which retards coagulation of blood.

**cytohyal plasma** (sɪ'tɒhɪ'ælɔplɛz mɛ) *n.* [Gk. *kystis* hollow *kystis* glass *plasma*, mould.] The substance of the cytomitome hyaloplasm.

**cytokl eal** (sɪ'tɒkɪn'eɪs) *n.* [Gk. *kystis* hollow *kinesis* movement.] Changes attending general cytoplasm during karyokinesis the separation of daughter-cells following division of parent cell

**cytology** (sɪ'tɒlədʒi) *n.* [Gk. *kystis* hollow hollow vessel *logos* discourse] The science dealing with structure functions, and life-history of cells.

**cytolymph** (sɪ'tɒlɪmf) *n.* [Gk. *kystis* hollow *L. lymphæ* water] Cell-sap the fluid part of cytoplasm.

- cytolysal (s'tōl'is) *n.* [Gk. *lysis* hollow, *lysis* loosing] A substance inducing cytolysis.
- cytolysis (s'tōl'is) *n.* [Gk. *lysis* hollow *lysis* loosing] Cell-dissolution; cell-degeneration.
- cytosome (s'tōs'm) *n.* [Gk. *lysis* hollow] The microsome or cytosome system of cell.
- cytomeres (s'tōm'ērs) *n. pl.* [Gk. *lysis* hollow *meros* part.] Cells in Caryotropha formed by division of schizont and giving rise to merozoites agametozooids non-nuclear portions of sperms.
- cytomicrosome (s'tōm'i'krōs'm) *n.* [Gk. *lysis* hollow *micro* small *soma* body] A microsome of cytoplasm, *opp.* karyomicrosome.
- cytomitome (s'tōm'i'tōm) *n.* [Gk. *lysis* hollow *mitos* thread.] The cytoplasmic thread-work.
- cytomorphosis (s'tōm'ōr'fōs'is) *n.* [Gk. *lysis* hollow *morphosis* shaping] The life-history of cells the series of structural modifications of cells or successive generations of cells cellular change, as in senescence.
- cyton (s'tōn) *n.* [Gk. *lysis* hollow] The body of nerve cell neurocyton.
- cytophan (s'tōf'ān) *n.* [Gk. *lysis* hollow *phaneros* visible.] Ovoid matrix surrounding karyophans in spironeve and axoneme fibres in Infusorian stalk.
- cytopharynx (s'tōf'ā'r'ingks) *n.* [Gk. *lysis* hollow; *pharynx* gullet.] A tube-like structure leading from mouth int. endoplasm in certain protozoa.
- cytophil (s'tōf'il) [Gk. *lysis* hollow *phileo* to love.] *Peri* haptophorous groups having an affinity for cells.
- cytaphore (s'tōf'ōr) *n.* [Gk. *lysis* hollow *phoreo* burden.] A cell regarded as bearer of parasitic Sporozoon central non-nucleated protoplasm in sperm morula blastophore
- cytoplasm (s'tōplāz'm) *n.* [Gk. *lysis* hollow *plasma* mould.] S b-

- stance of cell body exclusive of nucleus of karyoplasm.
- cytoproct (s'tōp'rōkt), cytopyrge (s'tōp'j) *n.* [Gk. *lysis* hollow *proctos* anus *pyrge* rump.] A cell-antra.
- cytor ticulum (s'tōr'tik'ūlūm) *n.* [Gk. *lysis* hollow *L. reticulum* little net.] The cytoplasmic thread work cytomitome spongioplasm.
- cytosin (s'tōs'in) *n.* [Gk. *lysis* hollow] A cleavage product of nucleic acid C H N O
- cytosome (s'tōs'ōm) *n.* [Gk. *lysis* hollow; *soma*, body] The cytoplasmic part of a cell a microsome *q.v.*
- cytostom (s'tōs'tōm) *n.* [Gk. *lysis* hollow *stoma*, mouth.] A cell-mouth.
- cytotaxis (s'tōt'āks'is) *n.* [Gk. *lysis* hollow *taxis* arrangement.] Re-arrangement of cells on stimulation.
- cytothesis (s'tōt'h'ēsis) *n.* [Gk. *lysis* hollow; *thesis* arranging] Regenerative tendency of a cell.
- cytot xin (s'tōt'āks'is) *n.* [Gk. *lysis* hollow *toxikon* poison.] A cell-poisoning substance formed in blood serum cytolytic enzymoid.
- cytotrophoblast (s'tōt'rōf'ōblāst) *n.* [Gk. *lysis* hollow *trophe* nourishment *blastos* bud.] Inner layer of trophoblast layer of Langham.
- cytotropism (s'tōt'rōp'iz'm) *n.* [Gk. *lysis* hollow *trophe* turning] The mutual attraction of two or more cells.
- cytotox (s'tōt'ōt'ik) *n.* [Gk. *lysis* hollow *toxos* animal.] Living within a cell *opp.* sporozoan trophozoite.
- cytula (s't'ūlā) *n.* [Gk. *lysis* hollow] The fertilized ovum or parent cell.

## D

- dacryocyst (dāk'rōs't) *n.* [Gk. *dakryon* tear *lysis* bladder] Lacrimal sac *syn.* *sacculus lacrimalis*.
- dacryon (dāk'rōn) *n.* [Gk. *dakryon*, tear] Point of junction of anterior border of lacrimal with frontal bone and frontal process of maxilla.

dactyl (dák'tíl) *n.* [Gk. *daktylos* finger] A digit finger or toe terminal ventral projection of pro-tarsus in scorpions dactylus.

dactylar (dák'tílár) *a.* [Gk. *daktylos* finger] *Part.* finger or digit.

dactylognathite (dák'tílógnáthít) *n.* [Gk. *daktylos* finger *gnathos* jaw] Terminal segment of a maxilli-ped

dactyloid (dák'tílóid) *a.* [Gk. *daktylos* finger *eidos* form.] Like a finger

dactylopatagi *m.* (dák'tílopátáji'úm) *n.* [Gk. *daktylos* finger *L. patagium* border] Ectopatagium *q.v.*

dactylopodite (dák'tílop'odít) *n.* [Gk. *daktylos* finger *podis* foot.] Distal joint in certain limbs of Crustacea metatarsus and tarsus, *f. spiders.*

dactyl por (dák'tílopó' ) *n.* [Gk. *daktylos* finger *poros* channel.] Opening in skeleton *f. Milloporina, f. r. protrusion of dactylosoord.*

dactyl pter us (dák'tílop'térús) *n.* [Gk. *daktylos* finger *pteron* wing] With anterior rays of pectoral fins more or less free.

dactylo ooid (dák'tílóso'oid) *n.* [Gk. *daktylos* finger *ooid* animal *eidos* form.] A hydroid modified for catching prey to *g.* with tenacles or short knobs, with or without a mouth.

dactylus (dák'tílds) *n.* [Gk. *daktylos* finger] Part of tarsus of an insect dactyl of scorpions.

dart (dárt) *n.* [O F *dart* dagger] Any structure resembling dart *appl.* crystalline structure in molluscs.

dart sac, —a small sac, containing limy dart, attached to vagina near its orifice in some gastropods.

dartoid (dár'toid) *a.* [Gk. *dartos* flayed.] *Part.* the dartos

dartos (dár'tós) *n.* [Gk. *dartos* flayed.] Tunica dartos, thin layer of non-striped muscle united to skin of scrotum.

Darwinian tubercle, —the slight prominence on helix of external

ear near the point where it bends downwards.

Darwinism (Dár'winizm) *n.* [C. Darwin]. The theory of origin of species by natural selection working on slight variations that occur thereby selecting those best adapted to survive.

dasypaed s (dás'péd'édz) *n.* *pl.* [Gk. *dasy* hairy *paed* child.] Birds whose young are downy at hatching dasypphyllous (dás'pí'fí'ús) *a.* [Gk. *dasy* hairy *phyllon* leaf] With thickly haired leaves.

dasermmodification (dow'ermódif-káshún) *n.* [Ger *Dasen* duration *L. modificatio* modification.] A change induced by environmental factors and persisting for several generations but not permanently the organism eventually reverting to type.

daughte (dó'ter) *n.* [A.S. *dehter* daughter] Offspring of first generation with no reference to sex as daughter-cell da ghter-nucleus etc. da ghter-chromosome chromatid during ana-phase

day etral —*appl.* plants in which flowering can be induced by either long or short photoperiod. *Cf.* long-day short-day

dealation (déaláshún) *n.* [*L. de* away *alatus* winged.] The removal of wings, as by female ants after fertilization.

deaminati n (délám'ínáshún) *n.* [*L. de* down Gk. *ammoniacum* resinous gum.] The conversion of ammonium salts into urea, partly accomplished in the liver

death (déth) *n.* [A.S. *deáth* death.] Complete and permanent cessation of vital functions in an organism.

death-point, —temperature above or below which organisms cannot exist.

Débove membran (Al G Débove French histologist). Layer between tunica propria and epibellum of tracheal bronchial and internal mucous membranes subepithelial endothelium.

decalcify (dēk'kāl'fī) v. [L. *de* away *calc* lime *facere* to make.] To deprive of lime salts to treat with acids for removal of calcareous part.

decamerous (dēkām'ērus) n. [Gk. *deka* ten *meros* part.] With the various parts arranged in tens.

decandrous (dēkām'drūs) n. [Gk. *deka* ten *andros* male.] II v-ing ten stamens.

decaploid (dēk'āplōid) n. [Gk. *deka* ten *aplois* one-fold *oides* form.] II v-ing ten times the haploid number of chromosomes.

decapod (dēk'āpōd) n. [Gk. *deka* ten *pous* foot.] Of Crustacea, with five pairs of legs on thorax of Cephalopoda, with ten arms.

decapodiform (dēk'āpōd'fōrm) n. [Gk. *deka* ten *pous* foot L. *forma*, shape.] Resembling decapod *appt* insect larvae.

d caudad (dēkām'tīd) n. [L. *decere* ten *caudare*, to cleave.] Cut into ten segments.

decemifoliate (dēs'ēm'fō'liāt) [L. *decem*, ten *folium* leaf.] Ten-leaved.

decunjugat (dēsēm'jōogāt) n. [L. *decem* ten *jungere* to join.] With ten pairs of leaflets.

decompartite (dēs'ēmpārt'it) n. [L. *decem* ten *partiri* to divide.] Ten-lobed divided into ten lobes.

decidua (dēkīd'tū) n. [L. *decidere* to fall off.] The mucous membrane lining the pregnant uterus, cast off after parturition.

decidual (dēkīd'tū) n. [L. *decidere*, to fall off.] Part decidua.

deciduat (dēkīd'tū) n. [L. *decidere* to fall off.] Characterised by having a decidua partly formed by the decidua.

deciduous (dēsīd'ū) n. [L. *decidere* to fall down.] Falling at end of growth period or at maturity.

declinate (dēk'līnāt) n. [L. *de* way *clinare* to bend.] Bending aside in curve, as anther filament in horse-chestnut.

decollated (dēkōl'lēd) n. [L. *de* away from *collum* neck.] With apex of spine wanting.

decompos d (dē'kōmpōz) n. [L. *de* away *com* with; *ponere* to rest.] Not in contact; not adhering mass of barbs of feather when separate decayed.

decompound (dē'kōmpōund) n. [L. *de* way *com* with; *ponere* to place.] With monopodial branching very complete and ultimate wings little developed *appt* leaf.

d conjugation (dē'kōnjōogā shūn) v. [L. *d* away from *conjugare* to join together.] Separation of paired chromosomes as before end of meiotic prophase.

d corticate (dēkōr'tīkāt) v. [L. *decorticare* to peel.] I remove bark or cortex. n. With cortex ablated.

decumbent (dēkūm'bēt) n. [L. *decumbere* to lie down.] *Appt* stems which trail on ground but rise at apex.

d current (dēkūr'tū) n. [L. *de* way; *currere* to run.] Having leaf base prolonged down stem as winged expansion or rib prolonged down stipe as gills of agaric.

decussate (dēkūs'āt) n. [L. *decussare* to cross.] Crossed having paired leaves, succeeding pairs crossing at right angles.

decussation (dēk'ūsā shūn) n. [L. *decussare* to cross.] Decussate condition of leaves crossing of nerves with interchange of fibres, as in optic and pyramidal tracts.

dedifferentiation (dēdīf'ērtēshā shūn) n. [L. *de* way from *differentia* difference.] The losing of characteristics of specialized cells and regression to more simple state.

dedoubl ment (dē dōoblē'mōng) n. [F. *dedoublement* dividing into two.] Chornal deduplication.

deduplication (dēdē pīkē shūn) n. [L. *de* by reason of; *duplicare* to double.] Choriads, p. 8

- defaecati n (dē'fēk'ahūn) n. [L. *defaecatio* voiding of excrement.] The expulsion of faeces.
- defensive (dēfēns'iv) a. [L. *defendere* to defend.] Protective *appl.* proteid substances which destroy toxic substances of bacteria *appl.* numerous organs or parts of organs in various animals or plants.
- deferent (dēf'ērēnt) a. [L. *deferre* to carry away.] Conveying away *appl.* ducts vasa deferentia, g.s.
- deferred (dēf'ērd') a. [L. *deferre* to carry off.] *Appl.* shoots arising from dormant buds.
- deficiency—(inactivation or absence of a chromosomal segment or gene.
- deficiency diseases, — pathological conditions in plants and animals, d to lack of certain necessary nutritive substances g crown rot in sugar beet due to boron deficiency diseases in mammals due to vitamin deficiency absence of vitamin A causing poor growth and xerophthalmia, —of B<sub>1</sub> beriberi —of B<sub>2</sub> retardation of growth, —of C scurvy —of D rickets, —of E, infertility and paralysis —of K bleeding —etc.
- definite (dēf'init) a. [L. *definire* to limit.] Fixed constant cymose *appl.* inflorescences with primary axis terminating early in a flower *appl.* stamens limited to twenty in number
- definitive (dēf'initiv) a. [L. *definire* to limit.] Defining & limiting complete fully developed final *appl.* host of adult parasite
- defoliate (dēf'oliat) a. [L. *defoliare* to strip of leaves] Bared at the annual fall. T deprive of leaves
- degeneration (dējēnērā'shū)n [L. *degenerare* to degenerate] Change to a less specialised or functionally less active form retrogressive evolution.
- deglutiti n (dēg'lūtish'ūn) n. [L. *de* down *glutire* to swallow] The process of swallowing
- dehiscence (dēh'is'ēns) n. [L. *de-*

- hiscere* to gape.] The spontaneous opening of an organ or structure along certain lines or in a definite direction.
- deinopore (dē'nōp'ōr) n. [Gk. *deinos* urn *poros* channel.] A cell bridge.
- deirids (dē'rīdz) n. pl. [Gk. *deiras* chain of hills] Cervical papillae in Nematoda.
- Diters cells (O F C *Deiters* German anatomist). Supporting cells between rows of outer hair cells in organ of Corti outer phalangeal cells.
- delamination (dēlam'īnā'shūn) n. [L. *de* down *laminare* layer] The dividing off of cells to form new layers.
- deletion (dēlēt'shūn) n. [L. *deleere* to efface.] A deficiency of an acentric part of chromosome; absence of a chromosome segment and of the genes involved.
- deliquescent (dēl'kwēs'ēnt) a. [L. *deliquescent* to become fluid.] Having lateral buds the more vigorously developed, so that the main stem seems to divide into number of irregular branches; becoming fluid
- delitescence (dēlēt'sēns) n. [L. *delitescere* to lie hidden.] The latent period of poison incubation period of a pathogenic organism.
- delomorphi (dē'lōm'ōr'fik) a. [Gk. *delos* visible *morphe* shape.] With definite form, *appl.* ocytic cells of the gastric glands delomorphous.
- delythrium (dēlth'riūm) n. [Gk. *delos* visible *thyron* little door] The opening between hinge and beak, for peduncle exit in many Brachlopoda
- deltidium (dēl'tid'ium) n. [Gk. *delta* *drom* *drom*] A plate covering the delthyrium.
- deltoid (dēl'toid) n. [Gk. *delta*; *oides* form.] More or less triangular in shape *appl.* muscle etc. *appl.* oral plates on calyx of Blastodes

- d manian (démán'lán) *n.* [*J G d* *Alan* French zoologist]. *Appl.* complex system of paired efferent tubes connecting with intestine and uteri in Nematoda, and associated with gelatinous secretion for protection of eggs.
- d m (dém) *n.* [Gk. *demus* people.] Assemblage of taxonomically closely related individuals aggregate of single cells.
- d mersal (démér'sál) *a.* [*L. demergere* to plunge into.] Living on or near bottom of sea or lake sunk.
- d merseed (démér'séd) *a.* [*L. demergere* to plunge into.] Growing under water *appl.* parts of plants.
- demibranch,—hemibranch *q.v.*
- demif et (démifé't) *n.* [*L. dividius* half *facies* face.] Part of parapophysis facet when divided between centra of two adjacent vertebrae.
- demilunes,—crescentic cells crescentic bodies of cells of some salivary gland alveoli, crescents of Glanzel or demilunes of Heidenhain.
- d miplate (dém'píát) *n.* [*L. dividius* half *platus* flat.] Plate cut off by fusion of adjoining plates behind it from central suture line of ambulacral area in echinoderm.
- demisheath (dém'héth) *n.* [*L. dividius* half *A.S. scutis* sheath.] One of paired protecting covers of insect ovipositor.
- d mold (démóid) *a.* [Gk. *domos* the common.] Abundant.
- denatant (déná'tánt) *a.* [*L. de* down from *natus* to swim.] Swimming, drifting or migrating with the current *opp.* contranantant.
- d driform (dén drí'fórm) *a.* [Gk. *dendron*, tree; *L. formis*, shape.] Dendroid tree-like.
- d ndrít (dén'drít) *n.* [Gk. *dendron* tree.] A fine branch of dendron dendron.
- dendrít (déndrít'ík) *a.* [Gk. *dendron* tree.] Dendroid *appl.* tree-like structures or markings like, *part* having dendrites or dendrons.
- dendrochronology (dén drókrónól'

óji) *n.* [Gk. *dendron* tree *chronos* time *logos* discourse] Determination of age of trees or timber dating by comparative study of tree rings; science of tree-ring analysis and its implications.

Dendrogaea (dén dró'jé'á) *n.* [Gk. *dendron* tree; *gaia*, earth.] A zoogeographical region including all the neotropical region except temperate South America.

dendroid (dén dróid) *a.* [Gk. *dendron* tree *oides* form.] Tree-like much branched.

dendrology (déndról'óji) *n.* [Gk. *dendron* tree; *logos* discourse.] The study of trees.

dendron (dén drón) *n.* [Gk. *dendron* tree.] A protoplasmic process of the nerve cell which conducts impulses towards the cell body.

d nitrification (dén'itrifíká shún) *n.* [*L. de* way Gk. *nitron* soda *L. facio* to make.] Reduction of nitrates to nitrites and ammonia, as in plant tissues or to molecular nitrogen as by certain soil bacteria.

dens (dén) *n.* [*L. dens* tooth.] Tooth or tooth-like process odontoid process of axis or epistropheus.

d ns eretina,—the third molar or wisdom-tooth.

dental (dén'tál) *a.* [*L. dens* tooth.] *Part*, tooth *appl.* nerves, blood-vessels, canals, furrows, papillae sac, tissue etc.

dentary (dén'tárf) *a.* [*L. dens* tooth.] *Part* dentaries, membrane bones in lower jaw of many vertebrates. *n.* Dentary bone or os dentale.

dentat (dén'tát) *a.* [*L. dens* tooth.] Toothed with sharp saw-like teeth on the margin.

d tate ciliate,—with teeth and hairs on the margins *appl.* leaves.

dentate crenate,—with marginal teeth somewhat rounded.

denticl (dén'tíkiz) *n. plu* [*L. denticulus* little tooth.] Small tooth like processes; the paragnaths of certain Polychaeta the teeth within the secondary ridge in Polyzoa; the scales of certain Elasmobranchii.

denticulate (déntik úlát) *n.* [L. *denticula* little tooth.] II *ing*  
denticles with minute marginal  
teeth.

dentin,—dentine *q.v.*

dental (dén'tál) *a.* [L. *dens*  
tooth.] *Part* dentine *appl.*  
tubules *a* canaliculi dentales.

dentin (dén'tín) *n.* [L. *dens* tooth.]  
A hard elastic substance chemi-  
cally resembling bone composing  
the greater part of teeth and  
denticles dentin.

dentition (déntitsh ún) *n.* [L. *dens*  
tooth.] The number arrangement  
and kind of teeth teething.

deperulation (dép'érúshún) *n.*  
[L. *de* way *peru* of *peru* wallet.]  
The pushing apart or throwing off,  
of bud scales.

depigmentation (dépíg'méntshún)  
*n.* [L. *de* way *pigment* to paint.]  
The destruction of color in cell  
by natural or experimental physio-  
logical processes.

depilati (dép'ílshún) *n.* [L. *de*  
away *pilus* hair] Loss of hairy  
covering as of plants when manu-  
al removal of hair.

deplanate (dép'lánsh) *a.* [L. *deplan-*  
*are* to level.] Levelled flattened.

depressant (dép'rés'ánt) *n.* [L. *de-*  
*primere* to keep down.] Anything  
that lowers vital activity.

depressomotor (dép'rés'omó'tór) *n.*  
[L. *deprimere* to keep down  
*movet* to move.] Any nerve which  
lowers muscular activity.

depressor (dép'rés'ó) *n.* [L. *de-*  
*primere* to keep down.] Any muscle  
which lowers or depresses any  
structure *appl.* a nerve which  
lowers the activity of an organ.

depula (dép'úlsh) *n.* [Gk. *depus*  
goblet.] Invaginated blastula pre-  
ceding gastrula stage in develop-  
ment of embryo.

deric (dér'ík) *a.* [Gk. *dero* kin.]  
Dermic *appl.* epithelium, synonym  
of epidermis.

derm (dér'm) derma (dér'mk) *n.*  
[Gk. *derma* skin] The layers of or-  
gument below the epidermis  
dermis.

dermal (dér'mál) *a.* [Gk. *derma*  
kin.] *Part* derma or skin.

dermallia (dér'mál'sh) *n. plur.* [Gk.  
*derma* skin.] Microscleres in the  
dermal membrane of sponges.

dermatocuticular (dér'mátík'úá'ré) *n.*  
[Gk. *derma* skin L. *articulus*  
joint.] The goniale *q.v.*

dermatogen (dér'mátó'jén) *n.* [Gk.  
*derma* skin *gennet* birth.] The  
young or embryonic epidermis in  
plants antigen of skin disease.

dermatoglyphics (dér'mátó'glí'fiks)  
*n.* [Gk. *derma* skin *glyphos* to  
carve.] Skin palm finger and  
toe prints print formulas.

dermatomes (dér'mátómsh) *n. plur.*  
[Gk. *derma* skin *temet* cutting.] La-  
teral parts of segmental mesoderm,  
which develop into connective tissue  
of corium dermis dermatomere.

dermatophyte (dér'mátó'fítsh) *n.* [Gk.  
*derma* skin *phyton* plant.] Any  
fungous parasite of skin dermatophy-  
ton, derm phyt epidermophyte.

dermatoplasm (dér'mátó'plázm) *n.*  
[Gk. *derma* skin *plasma* mould.]  
Cell-wall protoplasm.

dermatoplast (dér'mátó'plást) *n.*  
[Gk. *derma*, skin *plastis* moulded.]  
A protoplast with cell wall.

dermatopsy (dér'mátó'psh) *n.* [Gk.  
*derma* skin *opsis* sight.] Coodi-  
tion of seeing with the skin *a*  
with skin sensitive to light.

dermatoskeleton, —exoskeleton.

dermatosome (dér'mátó'sómsh) *n.* [Gk.  
*derma* skin *soma* body.] One of  
vital units forming cell membrane.

dermatozoon : (dér'mátó'zón) *n.*  
[Gk. *derma* skin *zoon* animal.]  
Any animal parasite of the skin ;  
ectozoon.

dermotoglossum (dér'mótó'gló's-  
úm) *n.* [Gk. *derma* skin *glossa*  
within *glossa* tongue] A hood  
arising by fusion of dental bases,  
covering entoglossum, in some  
fishes.

dermethmoid : (dér'méth'moid) *n.*  
[Gk. *derma* skin *thmos* nerve ;  
*oides* form.] S pra-ethmoid, *q.v.*

dermic (dér'mík) *a.* [Gk. *derma*  
skin] *Part* or derived from, skin.

- dermis (dér'mla) *n* [Gk. *derma* skin.] Derm *q.v.* corium.
- dermoblast (dér'mòblást) *n*. [Gk. *derma*, skin *blastos* bud.] The layer of mesoblast which gives rise to the derma.
- dermooccipital (dér'mòk'pítál) *n*. *plu.* [Gk. *derma* skin *L. occiput* back of head.] Two bones taking the place of interparietal in some lower forms and in development of higher.
- dermo-ossification (dér'mòs'fíkál shún) *n* [Gk. *derma* skin *L. os* bone *fero* to become.] A bone formed in the skin.
- dermopharyngeal (dér'mòfárin'jéál) *n*. [Gk. *derma*, skin *pharynx* gullet.] Superior or inferior plate of membrane bone supporting pharyngeal teeth in some fishes.
- derm phyte—dermatophyte, *q.v.*
- dermosclerites (dér'mòsklér'itís) *n* *plu.* [Gk. *derma*, skin *scleros* hard.] Masses of picles found in theca of Alcyonidae.
- dermo skeleton (dér'mòské'fítòn) *n*. [Gk. *derma* skin *skeletos* dried.] Exoskeleton, *q.v.*
- dermotrichia (dér'mòtrík'ia) *n*. *plu.* [Gk. *derma*, skin *trichis* hair.] Dermal fin-rays.
- dermosoon,—dermatosoon, *q.v.*
- derotreme (dér'òtrém) *n*. [Gk. *dero* skin *tréma*, aperture.] Skin forming an operculum as in Megalobatrachina.
- derotheca (dér'trothé'ka) *n* [Gk. *dertron* beak *theka* cup.] The horny casing of bird maxilla.
- dertrum (dér'trúm) *n*. [Gk. *dertron* beak.] Any modification of the casing of maxilla in birds.
- Descemet's membrane [J. Descemet French anatomist]. The posterior elastic lamina of cornea. Demour' membrane.
- descending (dés'énd dīng) *a*. [L. *de* down *scendere* to climb.] Directed downwards, or towards caudal region; *oppl.* blood vessels, nerves, etc.
- desegmentation (dés'ég'méntál shún) *n*. [L. *de* from *segmentum*, piece cut off] Fusion of segments originally separate.
- deserticolous (dér'ètrík'ólós) *n* [L. *desertus* waste *colore* to inhabit.] Desert inhabiting.
- desma (dés'má, dèz) *n*. [Gk. *desma* bond.] Megasciere which forms characteristic skeletal network of Lithistida.
- desmactinic (dés'máktín'ik) *n*. [Gk. *desma*, bond; *aktis* ray] With podia continued upwards to pical plate *oppl.* Stelleroides; *q.v.* hysactinic.
- desmergate (dés'mérgát) *n*. [Gk. *desma* bond *ergates* worker] A type of ant intermediate between worker and soldier.
- desocyte (dés'mòst) *n* [Gk. *desmos* bond *kytos* hollow] A connective tissue cell fibroblast.
- desmogen (dés'mòjén) *n*. [Gk. *desmos* bond *genes* descent.] Merismatic or growing tissue.
- desmognathous (dés'mòg'náthós) *n* [Gk. *desmos* bond *gnathos* jaw] Having maxillopalatines fused in middle line owing to other peculiarities in skull *oppl.* certain birds.
- desmology (dés'mòl'ój) *n* [Gk. *desmos* bond *logos* discourse.] The anatomy of ligaments *q.v.* syndesmology.
- desmoses (dés'mòs) *n*. *plu.* [Gk. *desmos* bond.] Chemical substances exchanged by way of protoplasmic bridges between cells amoebocytes *q.v.*
- desmose (dés'mòs) *n*. [Gk. *desmos* bond.] A strand connecting biopharoplasts at mitosis.
- desmosom (dés'mòsóm) *n*. [Gk. *desmos* bond *soma* body] A thickening of intercellular connections in epithelium; bridge cor pore.
- desquamation (dés'kwámál shún) *n*. [L. *de* way *spuere*, scale.] Shedding of cuticle or epidermis in flakes.
- determinant (détér'mínánt) *n*. [L. *determinare* to limit] A hypothetical unit, being an aggregation of biophores determining the



development of a cell or fan independently variable group of cells hereditary factor

determinate (dētēr'mīnāt) *n.* [L. *determinare* to limit.] With certain limits *appl* inflorescence with primary axis terminated early with a flower bud *appl* cleavage.

d termination (dētēr'mīnāshūn) *n.* [L. *determinatio* boundary] The process adjusting regional development according to relative location of region and organisation centre.

detorsion (dētōr'ashūn) *n.* [L. *de* way *torquere* to twist] Torsion in an opposite direction to that of original, resulting in a more or less posterior position of anus and circumanal complex.

detoxication (dētōksīkāshūn) *n.* [L. *de* way Gk. *toxikon* poison.] The inhibition of effects of toxins in the body either by a protective synthesis of comparatively harmless substances, or by means of antibodies.

detrusor (dētros'ōr) *n.* [L. *detruere* to thrust from.] The outer of three layers of the muscular coat of the urinary bladder physiologically all three layers detrusor urinae.

d uter all.—eurycyst *q.v.*

deut ro.—also see deutro-

d uterocerebrum (dū'tērōsēr'ēbrūm) *n.* [Gk. *deuteros* second L. *cerebrum* brain.] That portion of crustacean brain from which antennular nerves arise Cf. deutocerebrum.

deuterocoel (dū'tērōsēl) *n.* [Gk. *deuteros* second *koilos* hollow] The coelom

deuteroc no (dū'tērōkōn') *n.* [Gk. *deuteros* second *konos*, cone] Mammalian premolar cusp corresponding to molar protocone.

deutero genesis (dū'tērōjēn'ēsis) *n.* [Gk. *deuteros* second *genesis* origin.] Second phase of embryonic development involving growth in length and consequent bilateral symmetry / protogenesis.

deuteroplasm—deutoplasm *q.v.*  
deuteropolydesmic (dū'tērōpōlīdēs'mīk) *a.* [Gk. *deuteros* second *desmos* bond.] *Appl* cycloctenorial scales composed mainly of synpolydesmic scales.

deuteroprotease (dū'tērōprōtēās) *n.* [Gk. *deuteros* second *proteas* first.] A secondary product from digestion of proteids.

deuterostoma (dū'tērōs'tōmā) *n.* [Gk. *deuteros* second *stoma*, mouth.] A mouth formed secondarily as distinct from gastrula mouth.

deuterotoky (dū'tērōtōkī) *n.* [Gk. *deuteros* second *tokos* birth.] Reproduction of both sexes from parthenogenetic eggs of arthrotoky and thelytoky

Deut rozo (dū'tērōs'ōk) *a.* [Gk. *deuteros* second *see* life.] *Appl* and *peri* the newer Palaeozoic faunal epoch the ge of fishes, also of pteridoperms.

d uterosoid (dū'tērōs'ōid) *n.* [Gk. *deuter* second *zoon*, animal; *oides* form] A zooid produced by budding from a primary zooid

deutryalsome (dū'tēr'āldeōm) *n.* [Gk. *deuteros* second *kyrtos* glans *soma*, body] The nucleus remaining in ovum after formation of first polar body

deuto.—also see deutero-

de toblasts (dū'tōblāsts) *n. plu* [Gk. *deuteros* second *blastos* bud.] The amoeba like bodies formed from protoblasts in zygote of Micrococcia, and liberated to multiply in the blood.

deut broch (dū'tēbrōk) *a.* [Gk. *deuteros* second *brochos* mesh.] *Appl* uclei of gonia preparing for leptotene stage of protobroch.

deutocerebrum (dū'tēsēr'ēbrūm) *n.* [Gk. *deuteros* second L. *cerebrum* brain] Portion of insect brain derived from fused ganglia of antennary segment of head deutocerebrum. Cf. deutocerebrum.

dentomale (dē'tōmālē) *n. pl.* [Gk. *dentos* second *maw* check.] The broad plate in Chaetognatha, formed by fusion of second pair of mouth appendages.

dwtomerite (dū'tōm ērit) *n.* [Gk. *dexter* second *meres* part.] The posterior division of certain gregarines of primata.

deutonephros (dē'tōnēf'rōs) *n.* [Gk. *dexter* second *nephros* kidney] Mesonephros.

deutoplasm (dē'tōplāzm) *n.* [Gk. *dexter* second *plasma*, mould.] Yolk or food material in cytoplasm of ovum or other cell.

deutoscölex (dē'tōskō'lēks) *n.* [Gk. *dexter* second *scölex* worm.] A secondary scölex produced by bedding, in bladderworm stage of certain tape-worms.

dertosomes (dē'tōsēms) *n. pl.* [Gk. *dexter* second *soma*, body] Granules of nucleolus cast out into cytoplasm from which yolk is said to arise.

deutovum (dē'tōvūm) *n.* [Gk. *dexter* second *L. ovum* egg] A stage in the metamorphosis of certain mites.

development (dēv'lop'mēt) *n.* [F. *développer* to unfold] The changes undergone by an organism from its beginning to maturity.

deviation (dēv'ishēn) *n.* [L. *de* away from *via*, way] Divergence from corresponding developmental stages.

Devonian (dēv'ōnsh) *n.* [Dewon, where strata were first studied] Part or *epoch*. Palaeozoic geological period preceding Carboniferous.

dextrotropic (dēk'stōtrōp'ik) *n.* [Gk. *dexter* right *trope* turn.] Turning from left to right, as whorls *epoch* shells *epoch* spiral cleavage of cells; *epoch* movement of Volvox.

dextral (dēk'strāl) *n.* [L. *dexter* right hand.] Dextrotropic, *q.v.*

dextrin (dēk'strin) *n.* [L. *dexter* right hand.] A soluble substance derived from starch by exposure to high temperature for short time.

dextrose (dēk'strōs) *n.* [L. *dexter*

right *vertere* to turn.] Growing in a spiral which twines from left to right clockwise. *Opp* sinistrose.

dextrose (dēk'strōs) *n.* [L. *dexter* right.] Grape sugar or glucose, the end product of starch digestion,  $C_6H_{12}O_6$ .

diabetogenic (diabē'tōjēn'ik) *n.* [Gk. *diabainein*, to cross over *gignēs/hai* to beget.] Causing diabetes; *epoch* preputillary hormone antagonistic to insulin, affecting carbohydrate metabolism *epoch*, a hormone of sinus gland of eye stalk in crustaceans.

diachaenium (di'kē'niūm) *n.* [Gk. *dis* twice; *a* not *chaenion* to gaps.] Each part of cremocarp.

diachronous (di'āk rōnūs) *n.* [Gk. *dis*, asunder *chronos* time.] Dating from different periods *epoch* (osmils occurring in the same geological formation, though in different areas, due *q.v.* to changes in sea-level.

diachyma (di'kē'imā) *n.* [Gk. *dis* throughout *chymos* juice.] Leaf parenchyma.

diacoal (di'kāl) *n.* [Gk. *dis*, through *kollas* hollow] Third ventricle of brain.

diacranteral (di'ākran'tēr'ik) *n.* [Gk. *dis*, asunder *cranteris* wisdom teeth.] With diastema between front and back teeth, as in snakes.

diactinal (di'kē'tināl) *n.* [Gk. *dis* twice *aktis* ray] With two rays pointed at ends.

diadelphous (di'ādēl'fūs) *n.* [Gk. *dis* twice *adelphos* brother] Having stamens in two bundles owing to fusion of filaments.

diademateoid (di'ādēm'atōid) *n.* [Gk. *diadema*, crown *mades* shape.] Of Echinoides, having three primary pore plates with occasionally secondary between aboral and middle primary as *epoch* artaboid one primary with secondary on each side, and triplachinoid, two primaries, with one or more secondaries between.

diadr. *mous* (diād rōmūs) *n.* [Gk. *diadromos* wandering.] Having nerves or veins radiating fan-like manner *appl.* leaves.

diaen (di'ēn) *n.* [Gk. *dis* twice an analogy of triene from Gk. *trias*, trident.] A form of triene, with one of the cladi reduced or absent.

diageotropism (di'ājēōt'rōpizm) *n.* [Gk. *dis* through *ge* earth *trope* turn.] Tendency in certain parts of plants to assume position at right angles to direction of gravity.

diagnosis (di'agnōsis) *n.* [Gk. *dis* *gnosis* discrimination.] A concise description of an organism with full distinctive characters discrimination of a physiological or pathological condition by its distinctive signs.

diagnostic (di'agnōstik) *n.* [Gk. *diagnosis* discrimination.] Distinguishing differentiating the species or genus, etc. from others similar.

diabellotropism (di'ābēlōt'rōpizm) *n.* [Gk. *dis*, through *bellas* sun *trope* turn.] Diaphototropism.

diakinesis (di'ākinēsis) *n.* [Gk. *dis*, through *kinesis* movement.] The later prophase stage of meiosis, between diplotene and prometaphase movement of chromosomes between metaphase and telophase.

dialyn. *ury* (di'ālīnūs) *n.* [Gk. *dis* *lynē* to recoiled *neurōn* nerve.] In certain gastropods condition of having pleural ganglia united to opposite visceral nerve by anastomosis with pallial nerve.

dialypetalous (di'ālīpētālūs) *n.* [Gk. *dis* asunder *lynē* to loose *phalon* petal.] Polypetalous.

dialyphyllous (di'ālīfīlūs) *n.* [Gk. *dis* asunder *lynē* to loose *phyllon* leaf.] With separate leaves.

dialyssepalous (di'ālīsepālūs) [Gk. *dis* asunder *lynē* to loose *F* *sipale* sepal.] Polysepalous.

dialysis (diāl'isis) *n.* [Gk. *dis* asunder *lynē* loosing.] Separation of dissolved crystalloids and colloids through semipermeable

membrane, crystalloids passing more readily permeation.

dialysately (di'ālīsētī) *n.* [Gk. *dis* asunder *lynē*, to loose *stēle* post.] A condition in which the steles in the stem remain more or less separate.

diancistrion (di'ānsīstrōn) *n.* [Gk. *dis* twice *anagistrōn*, hook.] A spicel resembling a stout stigma, but the inner margin of both book and shaft thins out to knife edge and is notched. *Phn.* diancistra.

diandrous (diān drōs) *n.* [Gk. *dis* twice *anēr* man.] Having two free stamens.

diapause (di'āpōz) *n.* [Gk. *dis* *pausē* to make to cease.] A spontaneous state of dormancy during development as of insects resting stage between anatrepsis and katrepsis in blastokinesis sexual rest period *appl.* annelids of quiescence.

diapedesis (di'āpēdēsis) *n.* [Gk. *diapedēs* leaping through.] Emigration of white blood corpuscles through walls of capillaries into surrounding tissue migration of cells to exterior in certain larval sponges.

diaphototropism (di'āfōtōt'rōpizm) *n.* [Gk. *dis*, through *phōs* light *trope* turn.] Tendency of plant organs to assume position at right angles to rays of light diaphototropism.

diaphragm (di'āfrām) diaphragma (di'āfrāg'mā) *n.* [Gk. *diaphragma* mudriff.] The wall which separates the small cell the prothallus, from rest of macropore in Hydropteridaceae septum to nodes in Equisetum sheet of muscular tissue attached to nitrovert in worms single strongly developed septum in Terebelliformia perforated tissue that subdivides tentacle cavity in Polysora a fibro-muscular abdominal septum enclosing perineural sinus in certain insects the transverse septum separating cephalothorax from abdomen in certain Arachnida

special fan-shaped muscle spreading from anterior end of lita + oesophagus and base of lungs in Anura; partition partly muscular partly tendinous, separating cavity of chest from abdominal cavity in mammals. fold of dura mater on sella turcica.

diaphysal (di'fízal) *n.* [Gk. *dia* through *physis* to bring forth.] Shaft of hum bone *opp.* epiphysis; abnormal growth of an axis or shoot.

diapophysal (di'apófízal) *n.* [Gk. *dia*, through *epi* from *physis* to produce.] Lateral or transverse process of neural arch.

di paid (di'apaid) *n.* [Gk. *dis* twice *epi* arch.] Appl. skulls with supra and infra-temporal fossae distinct of synsapid.

diarch (di'ark) *n.* [Gk. *dis* twice *arche* origin.] With two xylem and two phloem bundles *appl.* root in which protoxylem bundles meet and form a plate of tissue across cylinder with phloem bundle on each side *appl.* a bipolar type of sporidia.

diarthral (di'arthral) *n.* [Gk. *dis* twice *arthron* joint.] *Pert.* two joints diarthral.

diarthrosis (di'arthrósis) *n.* [Gk. *dis* twice *arthron* joint.] An articulation allowing considerable movement.

diastichia (di'astíkhia) *n.* [Gk. *dia*, through *stichos* split.] Appl. type of tetrads which divide once transversely and once longitudinally in members of anastichae.

diapor (di'apóris) *n.* [Gk. *diapora*, dispersion (*dis*, asunder *pora*, seed.)] Any spore seed, fruit, or other portion of plant when being dispersed and ble to produce new plant diacornule, propagula.

diastase (di'astás) *n.* [Gk. *dia*-stasis to separate.] An enzyme which acts principally in converting starch into sugar.

diastasis (di'astásis) [Gk. *dia*, through *stasis* halt.] Rest period preceding systole.

diastatic (di'astátik) *n.* [Gk. *dia* through *stasis* to set.] *Pert.* diastase or having similar properties *Pert.* diastase.

diastem (di'astém) diastema (di'astémá) *n.* [Gk. *diastema*, space.] A toothless space usually between two types of teeth an equatorial modification of protoplasm preceding cell division.

diast r (di'st'it) *n.* [Gk. *dis* twice *aster* star.] The stage in mitosis where daughter chromosomes are grouped near spindle poles ready to form new nucleus.

diastole (di'st'ólé) *n.* [Gk. *diastole* difference.] Rhythmical relaxation of heart rhythmical expansion of a contractile vacuole *Opp.* systole.

diastomat (di'astómá'tik) *n.* [Gk. *dia*, through *stoma* mouth.] Through stomata or pores giving off gases from spongy parenchyma through stomata.

diathesis (di'th'ésis) *n.* [Gk. *diathesis* disposition.] A constitutional predisposition to type of reaction, disease or development.

diatom (di'átom) *n.* [Gk. *dia*, through *temno*, to cut.] A unicellular form of alga with walls impregnated with silica.

diatomin (di'átómin) *n.* [Gk. *dia*-temno to cut through.] A yellow pigment resembling fucoxanthin, in plastids of diatoms.

diatropism (di'atróplism) *n.* [Gk. *dia*, through *trope* turn.] The tendency of organs or organisms to place themselves at right angles to line of action of stimulus.

diaxon (di'ák'són) *n.* [Gk. *dis* twice *axon* axis.] With two axes, as certain sponge spicules.

diaxon (di'ák'són) *n.* [Gk. *dis* twice *axon* axis.] A nerve-cell with two axis-cylinder processes.

diblastula (di'blástula) *n.* [Gk. *dis* twice *blastos* bud.] A coelenterate embryo consisting of two layers arranged round central cavity.

dibranchial (di'bráń'kiál) *n.* [Gk. *dis* twice *branchia* gills.] With two gills.

dicaryon,—dikaryon.

dicellate (dī'sēllā) *a.* [Gk. *diabellō* two-pronged hoe.] With two prongs *appl.* sponge spicules.

dicentral (dīshēn'trāl) *a.* [Gk. *dis*, through *kēntron* centre.] *Appl.* canal in fish vertebral centrum.

dicentric (dīshēn'trīk) *a.* [Gk. *dis* twice *kēntron* centre.] Having two centromeres *appl.* chromatids, chromosomes.

dichasium (dīkā'zīum) *n.* [Gk. *di-* *chainein* to divide in two.] A cymose inflorescence in which two lateral branches occur about same level.

dichlamydeous (dīklāmīd'ēūs) *a.* [Gk. *dis* twice *chlamy* cloak.] Having both calyx and corolla.

dichogamy (dīkōg'āmf) *n.* [Gk. *diche* in two *gamos* marriage.] Maturing of sexual elements at different times, ensuring cross-fertilisation of protandry protogyny

dichoptil (dīkōp'tīk) *a.* [Gk. *diche* in two *optis* sight.] With eyes quite separate

dichotomous (dīkōt'ōmūs) *a.* [Gk. *diche*, in two *temnein* to cut.] *Part.*, characterised by dichotomy  
dichotomy (dīkōt'ōmf) *n.* [Gk. *diche* in two *temnein* to cut.] Branching which results from division of growing point into two equal parts.

dichroic (dīkrō'īk) *a.* [Gk. *dis* twice *chros* colour] Exhibiting dichroism, as chlorophyll solution of dichromatic.

dichroism (dīkrō'īsm) *a.* [Gk. *dis* twice *chros* colour] Property of showing two colours, as one colour by transmitted and the other by reflected light.

dichromatic (dīkrōmāt'īk) *a.* [Gk. *di* two *chroma* colour] With two colour varieties seeming only two colours.

dichromophil (dīkrōm'ōfil) *a.* [Gk. *di*- two *chroma* colour *philein* to love.] Staining with both acid and basic dyes.

dichthadlgyne (dīkthād'tījīnē) *n.*

[Gk. *dichthadlos* double *gyne* female] A gymecoid ant with voluminous ovaries, and without eyes and wings a dichthaduform female.

dichinous (dīklīnūs dīklī'ōūs) *a.* [Gk. *di-* *asunder* *kline* bed.] With stamens and pistils on separate flowers with staminate and pistillate flowers on same plant.

dicoccous (dīkōk'ūs) *a.* [Gk. *di* two *kobos* kernel.] Having two one-seeded coherent capsules.

dicostalla (dīkōstā'liā) *n.* [Gk. *di*- two *costa*, rib.] The second-brachs or second brachial series in a crinoid.

dicotyledon (dīkōtīl'ē'dōn) *n.* [Gk. *di* two *kotyledon* cup-shaped hollow] A plant with two seed-leaves.

dictyodromous (dīktōd'rōmūs) *a.* [Gk. *dictyon*, net *dromos* to run.] Net-veined when the smaller veins branch and anastomose freely

dictyogen (dīkt'ōjēn) *n.* [Gk. *dictyon* net *gennē* producing] A net leaved plant.

dictyokinesis (dīkt'ōkīn'ē'sis) *n.* [Gk. *dictyon* net *kinesis* movement.] The breaking-up of the Golgi-apparatus at mitosis and segregation of dictyosomes to daughter-cells.

dictyonalia (dīkt'ōnā'liā) *n.* [Gk. *dictyon* net.] The principal parenchyma species of Dictyonema and of many Lymnaea.

dictyosom (dīkt'ōsōm) *n.* [Gk. *dictyon* net *soma* body] An element of the Golgi-apparatus, *q.v.*

dictyospor (dīkt'ōsōpō) *n.* [Gk. *dictyon* net *spora* seed.] A pore, with transverse and longitudinal septa, of reticular appearance.

dictyostale (dīkt'ōstāl'ē) *n.* [Gk. *dictyon*, net *stale* post.] A net work formed by meristetes.

dictyotic (dīkt'ōt'īk) *a.* [Gk. *dictyon* net.] *Appl.* moment of shell or skeleton formation, or locution moment as of siliceous skeleton of radiolarians *appl.* stage in cell growth where chromosomes are lost to view in nuclear reticulum.

- diyclelic (dī'klyē'lik) *a.* [Gk. *di* two *kyklos* circle.] Having a row of periarthral infrabasals, *appl* theca of Crinoida; with two whorls biennial *appl* herba.
- didactyl (dī'dākt'ul) *a.* [Gk. *di* two *daktylos* digit.] Having two fingers or two toes.
- didelphic (dī'delf'ik) *a.* [Gk. *di*-double *delphos* womb.] Having two uteri as marsupials amphidelphic.
- didymospore (dī'dī'mōspōr) *n.* [Gk. *didymos* twin *sporos* seed.] A two-celled spore.
- didymous (dī'dī'mūs) *a.* [Gk. *didymos* twin.] Growing in pairs.
- didynamous (dī'dī'nāmūs) *a.* [Gk. *di*-two *dynamis* power.] With four stamens, two long two short.
- diection, —diections, *g.p.*
- diencephalon (dī'ēnkef'ālōn, -āl') *n.* [Gk. *dis* between *enkephalos* brain.] Part of the fore-brain comprising thalamencephalon, pars mammillaris hypothalam) and posterior part of third ventricle between-brain 'ween-brain inter brain.
- diestrum, —diestrous, *g.p.*
- differentiation (dī'fēren'shāl shōn) *n.* [L. *differe* to differ.] Modification in structure and function of the parts of an organism, owing to division of labour.
- diffluence (dī'flōōōō) *n.* [L. *dis* away *fluere* to flow.] Disintegration by vacuolisation.
- diffuse (dī'fūs) *a.* [L. *diffundere* to pour.] Widely spread not localised not sharply defined at margin *appl* placenta with villi on all parts except poles.
- diffuse-porous, — *appl* wood in which vessels of approximately the same diameter tend to be evenly distributed in growth ring of ring-porous.
- digametic (dī'gāmē'tik) *a.* [Gk. *dis* twice *gamos* spouse.] Exhibiting digamy having two types of gametes, one producing males, the other females heterogametic.
- digastri (dī'gāstr'ik) *a.* [Gk. *di*-two; *gaster* belly] Two-bellied *appl* muscles fleshy at ends, tendinous in middle biventral *appl* one of the suprabyoid muscles *appl* a branch of facial nerve.
- digenesis (dī'jēnē'sis) *n.* [Gk. *dis* twice *genesis* descent.] Alternation of generations, *g.p.*
- digenetic (dī'jēnē'tik) *a.* [Gk. *dis* twice *genesis* descent.] *Peri.* digenesis requiring an alternation of hosts, *appl* certain parasites.
- digynoporous (dī'jēnōpōrōs) *a.* [Gk. *dis* twice *gynē* birth *poros* pore.] With two genital pores, *appl* many Turbellaria.
- digestion (dī'jēs chōn) *n.* [L. *digestio* the digestion.] The process by which nutrient materials are rendered absorbable by action of various juices.
- digestive (dī'jēs'tiv) *a.* [L. *digestio* digestion.] *Peri.* digestion, or having power of aiding in digestion.
- digit (dī'it) *n.* [L. *digitus* finger.] Terminal division of limb in any vertebrate above fishes, toe or finger distal part of chela and chelicerae.
- digital (dī'it'āl) *a.* [L. *digitus* finger.] *Peri.* finger or digit also *appl* structures resembling a digit. *n.* Distal joint of spider's pedipalp.
- digitaliform (dī'it'āl'fōrm) *a.* [L. *digitus* finger *forma* shape.] Finger-shaped *appl* corollas which are like the finger of a glove.
- digitate (dī'it'āt) *a.* [L. *digitus* finger.] Having parts arranged like the fingers in a hand with fingers.
- digitiform (dī'it'āl'fōrm) *a.* [L. *digitus* finger *forma*, shape.] Finger shaped; *appl* roots.
- digitigrad (dī'it'igrād') *a.* [L. *digitus* finger *gradus* step.] Walking with only the digits touching the ground.
- digitinervat (dī'it'nēr'vāt) *a.* [L. *digitus* finger *nervus* sinew.] Having veins radiating out from base like fingers of a hand with usually five or seven veins *appl* leaves.

- digitipartite** (dij'tipār'tit) *n.* [*L. digitus* finger *partire* to divide.] Having leaves divided up in a hand-like pattern.
- digitipinnate** (dij'tipin'ār) *n.* [*L. digitus* finger *penna* feather] Having digitat leaves of which the leaflets are pinnate.
- digitule** (dij'tul) *n.* [*L. digitulus* little finger] Any small finger-like process small process on insect tarsal.
- digonetric** (dij'gōn'trik) *n.* [*Gk. dis* twice *gonerōn* to produce.] Breeding twice a year.
- digonic** (dij'gōn'ik) *n.* [*Gk. dis* twice *gonē* seed.] Producing male and female gametes in separate gones in the same individual of amphigonic.
- digonoporous** (dij'gōnōp'ōrōs) *n.* [*Gk. dis* twice *gonē*, seed *poros* pore.] With two distinct genital apertures, male and female.
- digynous** (dij'inūs) *n.* [*Gk. di* two *gynē* woman] Having two carpels.
- diheliotropism** *m.* — **diheliotropism** *f.*
- diheterozygote** (dij'hētērōz'gōt) *n.* [*Gk. dis* twice *heteros* other *zygos* yoked together] A dihybrid.
- dihybrid** (dihī'brīd) *n.* [*Gk. dis* twice *L. hybridus*, mixed offspring] A cross whose parents differ in two distinct characters an organism heterozygous regarding two pairs of alleles.
- dikaryon** (dikā'ryōn) *n.* [*Gk. dis* twice *karyon* nucleus.] A pair of nuclei as in cells of sacogenous hyphae.
- dilatator** — **dilator** *q.*
- dilatate** (dillāt'ēd) *n.* [*L. dilatare* to flatten.] Expanded or flattened *appl.* parts of insects etc. with a wide margin.
- dilator** (dillā'tōr) *n.* [*L. dilatare* to expand.] Name *appl.* any muscle that expands or dilates an organ.
- dilophous** (dillō'fūs) *n.* [*Gk. di* two *lophos*, crest] *Appl.* tetractinal picule with two rays forked like crest.
- diluvial** (dillū'vīāl) *n.* [*L. diluvium* deluge] *Part* the present geological reckoning.
- dimegaly** (dimēg'āl) *n.* [*Gk. dis* twice *megalos* great.] Condition of having two sizes or a bimodal size frequency *appl.* spermatozoa, ova.
- dimerous** (dīm'ērūs) *n.* [*Gk. dis* twice *meros* part.] In two parts; having each whorl of two parts with a two-jointed tarsus.
- dimidiate** (dimīd'it) *n.* [*L. dimidius* half.] Having only one-half developed having capsule split on one side.
- dimorphism** (dimōr'fizm) *n.* [*Gk. dis* twice *morphē* shape.] Condition of having stamens of two different lengths, of having two different kinds of leaves, flowers, etc. *stat.* of having two different forms according to sex or of one sex, two different kinds of spores, or of offspring of broods which owing to differing conditions, differ in size colouring.
- dimyric** (dimīl'rīk) *n.* [*Gk. dis* twice *my* muscle] Having two adductor muscles dimyrian.
- dimergate** (dimērgāt) *n.* [*Gk. dimerein* to roam *ergates* worker] A soldier ant.
- dinauron** (dinērōn'it) *n.* [*Gk. dis* twice *neurōn* nerve.] With double innervation *appl.* chromatophores with concentrating and dispersing nerve fibres.
- dinomi** (dinōm'ik) *n.* [*Gk. dis* twice *nomos* district] *Appl.* an organism restricted to two of the biogeographical divisions of the globe.
- dioecion** (diēs'is) *n.* [*Gk. dis* twice *eikos* house.] Having sexes separate having male and female flowers on different individuals gonochoristic exhibiting dioecism or gonochorism.
- dioestrus** (diēs'trūs) *n.* [*Gk. dis* between *oistros* gadfly] The quiescent period between heat periods in polyoestrous animals dioestrum.

**diomyschou** (di'omsk ou) *n.* [Gk. *d* two *mys* nail.] Having two claws, on tarsal of certain spiders.

**dioptrate** (diop trāt) *n.* [Gk. *d* twice *op* eye.] Having eyes or ocelli separated by narrow line.

**dioptic** (diop'trik) *n.* [Gk. *dioptron* spying-glass.] Pert transmission and refraction of light *appl* structures, as cornea, lens aqueous and vitreous humors.

**diorchic** (diōr'kik) *n.* [Gk. *dis* twice *orchis* testis.] Having two testes.

**dipetalous** (dipēt'alūs) *n.* [Gk. *dis* twice; *petalon* petal.] Having two petals.

**diphaal** (difā zik) *n.* [Gk. *dis* twice *phainō* to appear.] *Appl* extended life cycle of some protozoa, including the active stage of monophasic periodically changing two states or appearances, as of winter and summer pelage or plumage.

**diphycercal** (dif'ēr'kāl) *n.* [Gk. *diphys* twofold *kērka* tail.] With a tail in which vertebral column runs straight to tip, thereby dividing the fin symmetrically.

**diphygeneti** (dif'jēn'ētik) *n.* [Gk. *diphys* twofold *gēnetis* begetting.] Producing embryos of two different types, as Dicyemida.

**diphygeni** (dif'jēn'ētik) *n.* [Gk. *diphys* twofold *gēnes* descent.] With two types of development.

**diphystic** (dif'ist'ik) *n.* [Gk. *dis* twice *styx* river.] Pert or having origin in two lines of descent.

**diphyodont** (dif'ibōnt) *n.* [Gk. *diphys* twofold *odous* tooth.] With deciduous and permanent sets of teeth.

**dipianetary** (dip'lan etārī) **dipianetic** (dip'plān'ētik) *n.* [Gk. *dis* twice *planetēs* wandering.] With two distinct types of zoospores.

**dipianetism** (dip'lan etizm) *n.* [Gk. *dis* twice *planetēs* wandering.] Condition of having two periods of motility in one life history as of zoospores in some fungi.

**diparthrous** (dipār'thrūs) *n.* [Gk. *diphys* double *arthron* joint.] With tarsal or carpal bones of one

row articulating with two bones; the other

**dipleurula** (diploor'ulā) *n.* [Gk. *d* twice *pleuron* side.] A bilaterally symmetrical larva of echinoderms an echinopaedum.

**diplobiont** (dip'lobi'ōnt) *n.* [Gk. *diphys* double; *bios* living.] An organism characterized by two kinds of individuals, asexual and sexual.

**diploblastic** (dip'loblās'tik) *n.* [Gk. *diphys* double *blastis* bud.] Having two distinct germ layers.

**diplocardiac** (dip'lokār'diāk) *n.* [Gk. *diphys* double *kardia* heart.] With the two sides of the heart quite distinct.

**diplocaulescent** (dip'lokāler'ent) *n.* [Gk. *diphys* double; *kaulos* stem.] With secondary stems.

**diplochromosomes** (dip'lokro'mōsōm) *n.* [Gk. *diphys* double *chroma* color *soma*, body.] Abnormalous chromosomes having four chromatids instead of two attached to centromere.

**diploidal** (dip'lobdāl) *n.* [Gk. *diphys* double *hodos* way.] Having both promodes and apobodus *appl* Porifera.

**diploia** (dip'lobē) *n.* [Gk. *diphys* double.] The cancellous tissue between outer and inner lamellae of certain skull bones tail of scorpion mesophyll.

**diploganglionic** (dip'logāng'gliāt) *n.* [Gk. *diphys* double *ganglion* ganglion.] With ganglia in pairs.

**diplogenesis** (dip'lojēn'ēsis) *n.* [Gk. *diphys* double *gēnesis* descent.] Supposed change in germ plasma that accompanies one and diverse changes occurring in body tissues development of two parts instead of usual single part.

**diplois** (dip'lobē) *n.* [Gk. *diphys* double.] Occupying channels in cancellous tissue of bones.

**diploid** (dip'lobd) *n.* [Gk. *diphys* double *eidos* form.] Having a double set of chromosomes *appl* typical or zygotic somatic number of chromosomes of species. *n.* A diploid organism of haploid.



diploidisation,—doubling of number of chromosomes in haploid cell or hyphae.

diploonema (dip'lōnē mā) *n.* [Gk. *diploos* double *nema*, thread] Double thread of diplotene stage in meiosis.

diploon phridia (dip'lōnēfrīd'ia) *n. pl.* [Gk. *diploos* double *nephros* kidney *idion* dem.] Nephridia derived partly from ectoderm partly from mesoderm.

diploonural (dip'lōnē rāl) *a.* [Gk. *diploos* double *neurōn* nerve.] Supplied with two nerves.

diploont (dip'lōnt) *n.* [Gk. *diploos* double *on* being] An organism having diploid somatic nuclei, *off* haploont.

diploperistomous (dip'lōpēris tōmūs) *a.* [Gk. *diploos* double *peri* around *stoma*, mouth.] Having a double projection or peristome.

diplophase (dip'lōfāz) *n.* [Gk. *diploos* double *phasis* aspect.] Stage in life history of an organism when nuclei are diploid sporophyte phase diplophase stage in meiosis.

diplophyll (dip'lōfīl) *n.* [Gk. *diploos* double *phylon* leaf.] A leaf having palisade tissue on upper and lower side with intermediate spongy parenchyma.

diplopiacula (dip'lōpiak'ula) *n.* [Gk. *diploos* double *platys* flat cake.] A flattened blastula consisting of two layers of cells.

diplopore (dip'lōpōr) *n.* [Gk. *diploos* double *poros* passage.] Respiratory organ in Cystodera.

diploptil (dip'lōptīl pīl) *a.* [Gk. *diploos* double *ptilon* feather] Double neoseoptile without raches formed by precocious development of the barbs of the teloptile.

diplosts (dip'lōst) *n.* [Gk. *diploos* double] Doubling of the chromosome number in syngamy.

diplosma (dip'lōsōm) *n.* [Gk. *diploos* double *soma* body] A double centrosome lying outside the nuclear membrane paired heterochromosome.

diplosomit (dip'lōsōmī) *n.* [Gk. *diploos* double *soma*, body] Body segment consisting of two annular parts prozonite and metazonite, in Diplopoda.

diplosphene (dip'lōsfēn) *n.* [Gk. *diploos* double; *sphēn* wedge] Wedge-shaped process on neural arch of certain fossil reptiles.

diplospondylic (dip'lōspōndīl'ik) *a.* [Gk. *diploos* double *spondylos* vertebra.] With two centra to each myotome or with one centrum and well-developed intercentrum exhibiting diplospondyly.

diplostemonous (dip'lōstēmōnūs) *a.* [Gk. *diploos* double; *stemon* stamens.] With two whorls of stamens in regular alternation with perianth leaves with stamens double the number of petals.

diplostichous (dip'lōstīkūs) *a.* [Gk. *diploos* double *stichos* row] Arranged in two rows or series.

diplostegia (dip'lōstē'ia) *n.* [Gk. *diploos* double *stegos* roof] An inferior fruit with dry dehiscient pericarp.

diplostene (dip'lōstēn) *a.* [Gk. *diploos* double *stēnos* band.] Appl stage in meiosis at which bivalent chromosomes split longitudinally.

diplosylic (dip'lōsīl'ik) *a.* [Gk. *diploos* double *sylos* wood.] Appl leaf trace bundles with inner and outer strands of wood in certain extinct plants.

diplozoic (dip'lōzō'ik) *a.* [Gk. *diploos* double *zoos* animal.] Bilaterally symmetrical.

dipnoan (dip'nōān) *a.* [Gk. *dis* twice *pnaiō* breathe.] Breathing by gills and lungs.

diprotodont (dip'rōtōdōnt) *a.* [Gk. *dis* twice *protos* first *odontos* tooth.] Having two anterior incisors large and prominent, the rest of incisors and canines being smaller or absent.

dipterocidium (dip'tērōsēid'īōm) *n.* [Gk. *dis* twice *pteron* wing *kollis* gall in *dion* dim] Gall caused by dipterous insect.

dipterous (dip'tērūs) *n.* [Gk. *dis* twice *pteron* wing] With two wings or wing-like expansions.  
 directive mesenteries,—in Zoantharia, the dorsal and ventral pairs of mesenteries.

disc (disk) *n.* [L. *discus* disc.] Any flattened portion like a disc in shape. middle part of capitulum in Compositae adhesive tip of tendril base of sea-weed thallus circumoral area in many animals; circular areas at opposite poles of many animals any modification of thalamus area marking entrance of optic nerve into eye cup-shaped tactile structures in skin mass of cells of *membrana granulosa* which projects into cavity of egg follicle anisotropic and isotropic parts of contractile fibrils of muscular tissue disk.

disc florets,—inner florets borne on abbreviated and reduced peduncle in many inflorescences.

disclal (dis'kal) *n.* [L. *clavus* disc.] Part any disc-like structure; *appl.* cross-vein between third and fourth longitudinal veins of insect wing *n.* A large cell at base of wing of Lepidoptera completely enclosed by wing nervures, also in some Diptera.

disciflorous (dis'kiflō'rūs dis'fiflō'rūs) *n.* [L. *discus* disc *flor* flower] With flowers in which receptacle is large and disc-like.

disclimax (dis'kil'māks) *n.* [Gk. *dis* double *climax* ladder] Disturbance climax, stage in plant succession replacing or modifying true climax, usually due to animal and human agency *f* cultivated crops.

discoblastic (dis'koblas'tik) *n.* [Gk. *diskos* disc *blastos* bud.] Part meroblastic eggs in which area of segmentation is disc-shaped.

discoblastula (dis'kobblās'tūla) *n.* [Gk. *diskos* disc *blastos* bud.] A blastula formed from meroblastic egg with disc-like blastoderm.

discocarp (dis'kobkarp) *n.* [Gk. *dis* *her* disc *karpes* fruit.] Special

enlargement of thalamus below calyx apothecium

discoctast 1 (disk'oktās tērs) *n.* *pl* [Gk. *diskos* disc *oktō* eight; *aster* star] Sponge spicules with eight rays terminating in discs, each disc corresponding in position to corners of a cube modified hexactines.

discoactylus (dis'kodakt'ylūs) *n.* [Gk. *diskos* disc *dactylus* finger] With sucker at end of digit.

discohexactine (dis'kohēksakt'in) *n.* [Gk. *diskos* disc *hex* six *aktis* ray] A sponge spicula with six equal rays meeting at right angles.

discohexaster (dis'kohēksastēr) *n.* [Gk. *diskos* disc *hex* six *aster* star] A hexactine with rays ending in discs.

discoïd (dis'koïd) *n.* [Gk. *diskos* disc *oides* form] Flat and circular disc-shaped.

discoïdal (dis'koï'dāl) *n.* [Gk. *diskos* disc; *oides* form.] Disc-like *appl.* segmentation in which blastoderm forms one-layered disc or cap which spreads over yolk *appl.* placenta.

discontinuity (dis'kontinū'itē) *n.* [O F *discontinuer* from L. *dis* under *continere* to continue.] Occurrence in two or more separate areas or geographical regions disjunction.

discontinuous variation,—mutation, *q.v.*

discoïla (diskōn ilā) *n.* [Gk. *diskos* disc.] Eight rayed stage in larval development of certain Coelentera.

discoctaster,—discoctaster *q.v.*  
 discoplace (dis'kōplāsēn'tā) *n.* [L. *discus* disc *placenta* placenta.] A placenta with villi on circular cake-like disc.

discoplasma (dis'kōplāsmā) *n.* [Gk. *diskos* disc *plasma*, form.] Colourless framework or stroma of red blood corpuscle.

discochord (dis'kokhord) *n.* [Gk. *diskos* disc; *chordos* rod.] A linear sponge spicule with disc-like outgrowths or whorls of spines.

**discus proligerus**.—In a Graafian follicle the mass of cells of membrana granulosa in which the ovum is embedded.

**dissunct** (disjunkt) *n.* [L. *dissunctus* separated.] With body regions separated by deep constrictions.

**dissjunction** (disjunktshun) *n.* [L. *dissunctus* separated.] Divergence of paired chromosomes in anaphase; geographical distribution in discontinuous areas.

**dissjuncti e symbiosis**.—a mutually helpful condition of symbiosis although there is no direct connection between the partners.

**dissjunctor** (disjunktör) *n.* [L. *dissunctus* separated.] Weak connective structure and zone of separation between successive conidia bridge.

**disk** (disk) *n.* [Gk. *diskos* disc.] See disc.

**disomi** (disömi) *n.* [Gk. *dis* twice *ömis* body] Part of having two homologous chromosomes genes.

**disoperation** (disöperashun) *n.* [L. *dis* around *operis* work.] Conditions resulting in disadvantage to individual or to group indirectly harmful influence for organisms upon each other.

**dispermial** (dispermi) *n.* [Gk. *dis* twice *perma* seed.] Part of by two spermatozoa *appl.* fertilization of an ovum.

**dispermous** (disper'müs) *n.* [Gk. *dis* twice *sperma*, seed.] Having two seeds.

**dispermy** (dispermi) *n.* [Gk. *dis* twice *sperma* seed.] The entrance of two spermatozoa into an ovum.

**dispersal** (disper'säl) *n.* [L. *dis* *pergere* to disperse.] The actual scattering distributing of organisms on earth surface transport of diaspores.

**disphotic**.—dysphotic.

**dispireme** (dispi'em) *n.* [Gk. *dis* twice *sperma* semen.] The stage of karyokinesis in which each

daughter nucleus has given rise to a spireme.

**displacement** (displäsmēt) *n.* [O F *displacer* to displace.] An abnormal position of any part of a plant due to its shifting from its normal place of insertion.

**disporocystid** (dispörösis'id) *n.* [Gk. *dis* twice *spora* seed *kytis* bladder] *Appl.* oocyst of Sporozoa when two sporocysts are present.

**disporous** (dispörüs) *n.* [Gk. *dis* twice *spora* seed.] With two spores.

**dissected** (disäkt'id) *n.* [L. *dissecare* to cut open.] Having lamina cut into lobes, incisions reaching nearly to midrib with parts displayed.

**dissepiment** (dissep'imēt) *n.* [L. *dissepere* to separate.] The partition found in some compound ovaries in corals, one of oblique calcareous partitions stretching from septum to septum and closing interseptal loculi below.

**disill** (disill'ent) *n.* [L. *disillire* to burst asunder.] Springing pen *Appl.* capsules of various plants which dehisc explosively.

**disimilati** (disäsimiläshun) *n.* [L. *disimilis* unlike.] katabolism, *q.v.*

**dissoconch** (disököngk') *n.* [Gk. *disso* double *konche* shell.] The shell of a veliger larva.

**dissozony** (disö, zöni) *n.* [Gk. *disso* double *gonos* descent.] Condition of having two sexually mature periods the same animal—one in larva one in adult also dissozony.

**distad** (dis'täd) *adv.* [L. *distare* to stand apart *ad* to.] Towards or to position way from centre or from point of attachment in a distal direction.

**distal** (dis'täl) [L. *distare* to stand apart.] Standing in part distant, *appl.* bristles, etc. *part* end of any structure farthest from middle line of organism or from point of attachment. *Opp.* proximal.

distalia (dī'stālī) *n. pl.* [L. *distare* to stand apart.] The distal or third row of carpal or of tarsal bones.

distanc receptor — a sense-organ which reacts to stimuli emanating from distant objects: an olfactory, visual or auditory receptor. *disti*-receptor *disto*-receptor *tele*-receptor.

distichalia (dī'stīk'ālī) *n. pl.* [Gk. *distichos* with two rows.] 1

Crinoides, the secondary brachialia.

distichous (dī'stīk'ūs) *a.* [Gk. *distichos* with two rows.] Two-ranked *appl.* alternate leaves, so arranged that first is directly below third.

distipharynx (dī'stīf'ar'ingks) *n.* [L. *distans* standing part. Gk. *pharynx* gullet.] A short tube formed by union of epi- and hypopharynx in some insects.

distiproboeci (dī'stīprōbō'ē) *n.* [L. *distans* standing apart. Gk. *proboscis* trunk.] Distal portion of insect proboscis, part of ligula.

dististyl (dī'stīstīl) *n.* [L. *distans* standing apart. Gk. *stylus* pillar.] Distal part or style borne on basistyle, *q.v.* of gonostyle in mosquitoes.

distoceptor (dī'stōēp'tōr) *n.* [L. *distans* to stand apart. *capere* to receive.] A distance receptor *q.v.* teleceptor.

distractil (dī'strākt'īl) *a.* [L. *distrahere* pulled asunder.] Widely separate *appl.* usually to long stalked anthers.

distribution (dī'strībū'shūn) *n.* [L. *distributus* divided.] Range of an organism or group in biogeographical divisions of globe.

disymmetrical (dī'sīmētrī'sīkāl) *a.* [Gk. *dis* twice *syn.* with *metros* measure.] Bilateral *q.v.*

dithecal (dī'thē'kāl) [Gk. *dis* twice *theka* box.] Two-celled as anthers.

ditokous (dī'tōk'ūs) *a.* [Gk. *dis* twice *tokos* birth.] Producing two at time, either eggs or young.

ditrematous (dī'trēmāt'ūs) *a.* [Gk. *dis* twice *tréma*, opening.] With separate genital openings; with anus and genital openings separate.

ditrochous (dī'trōk'ūs) *a.* [Gk. *dis* twice *trochos* runner.] With divided trochanter.

diureals (dīū'ē'al) *n.* [Gk. *dia*, through *ouron* urine.] Increased or excessive secretion of urine.

diurnal (dīū'r'nal) *a.* [L. *dius* day.] Opening during the day only active in the day-time.

divaricate (dīvār'īkāt) *a.* [L. *divertere* stretched part.] Widely divergent; blades forked.

divaricators (dīvār'īkātōrs) *n. pl.* [L. *divaricator* stretched apart.] Muscles stretching from ventral valve to cardinal process in brachyopods muscles in vicularia.

divergency (dīvēr'jēns) *n.* [L. *divergere* to bend way.] The fraction of a stem circumference, usually constant for a species, which separates two consecutive leaves in a spiral.

divergent (dīvēr'jēnt) *a.* [L. *divergere* to bend away.] Separated from one another *appl.* leaves.

diverticuli (dī'vēr'tīk'ulūm) *n.* [L. *de* way *vertere* to turn.] A tube or sac, blind at distal end, branching off from a canal or cavity.

divided (dīvī'dēd) *a.* [L. *dividere* to divide.] With lamina cut by incisions reaching midrib *appl.* leaves.

disol (dī'sō'lk) *a.* [Gk. *dis* twice; *solon*, animal.] *Pert.* spore containing two sporozoites.

disygotic (dī'sīgō'tīk) *a.* [Gk. *dis* twice; *sygos* yoked.] Originating from two fertilized ova *appl.* twins disygous binovular.

Dohl's line, — Z-dac or telophragma.

dodecagynous (dōdēkāj'īnūs) *a.* [Gk. *dodēka*, twelve *gynē* woman.] Having twelve pistils.

dodecamerous (dōdēkām'ērūs) [Gk. *dodēka*, twelve *meros* part.] Having each whorl composed of twelve parts.

dodecandrous (dōdēkām'drūs) *a.* [Gk. *dodēka*, twelve *andros* man.] Having at least twelve stamens.

**dolabriform** (dōlā'brīfōrm) *a.* [L. *dolabrum* mattock *forma* shape.] Axe-shaped.

**dolichocephalic** (dōl'īkōkēfāl'īk, -ēf) *a.* [Gk. *dolichos* long *kephale* head.] Long-headed with cephalic index of under 75 *cf.* brachycephalic.

**dolichohierl** (dōl'īkōhī'ērīk) *a.* [Gk. *dolichos* long *hieros* sacred.] With sacral index below 100 *cf.* platyhiere.

**dolichostylous** (dōl'īkōstī'lūs) *a.* [Gk. *dolichos* long *stylas* pillar.] *Pert.* long-styled anthers in dimorphic flowers.

**dolloform** (dōl'ōfōrm) *a.* [L. *dolium* wine-cask *forma*, shape.] Barrel-shaped.

**dominant** (dōm'nānt) *a.* [L. *dominus* ruling.] *Appl.* plants which by their extent determine biotic conditions in given area *appl.* species prevalent in a particular community or at a given period *appl.* character possessed by one parent which in hybrid masks the corresponding alternative character derived from the other parent *appl.* the parental allele manifested in the F heterozygote *opp.* recessive *appl.* stimulated part of brain when excitation is increased by stimuli usually inducing other reflexes *appl.* parts of body controlling less active parts

**dominator** (dōm'nātōr) *n.* [L. *dominator* rule.] A broad band of the spectrum which evokes sensation of luminosity i light adapted eye of modulator

**dopa** (dō'pā) *n.* [Dihydroxyphenyl alanine.] A amino-acid formed from tyrosine by action of ultra-violet rays, and oxidised by dopa oxidase or dopase to red precursor of melanin as in basal layers of epidermis  $C_9H_9ON$

**dormancy** (dōr māsī) *n.* [F *dormir* from L. *dormire* to sleep.] A resting or quiescent condition reduction in protoplasmic activity due to carbon dioxide concentration, *appl.* seed hibernation and aestivation

**dormancy callus**,—callose deposited on sleeve areas at the onset of winter

**dorsad** (dōr'sād) *adv.* [L. *dorsum* back *ad* to.] Towards back or dorsal surface *opp.* ventrad.

**dorsal** (dōr'sāl) *a.* [L. *dorsum* back.] *Pert.* or lying near back, *opp.* ventral surface *pert.* surface farthest from axis upper surface of thallus or prothallus of ferns etc

**dorsalis** (dōr'sāl'īs) *n.* [L. *dorsum* back.] The artery which supplies the back of any organ.

**dorsiferous** (dōr'sīf'ērūs) *a.* [L. *dorsum* back *ferre* to carry.] With scori on back of leaf; carrying the young on the back.

**dorsiflexed** (dōr'sīf'īk's) *a.* [L. *dorsum* back *flexere* to fix.] H ring filament attached to back of anther

**dorsigrad** (dōr'sīgrād) *a.* [L. *dorsum* back *gradus* step.] Having back of digit on the ground when walking

**dorsapinal** (dōr'sāpt'nāl) *a.* [L. *dorsum* back *spina* spine.] *Pert.* or referring to back and spine.

**dorsal atral** (dōr'sātrāl) *a.* [L. *dorsum* back *venter* belly.] With upper and lower surfaces distinct bifacial / dorsoventral

**dorsocentral** (dōr'sōsēn'trāl) *a.* [L. *dorsum* back *centrum* centre.] *Pert.* mid-dorsal surface *pert.* aboral surface of echinoderms.

**dorsolumbar** (dōr'sōlūm'bār) *a.* [L. *dorsum* back; *lumbus* loin.] *Pert.* lumbal region of back

**dorsoumbonal** (dōr'sōdūm'bōndl) *a.* [L. *dorsum* back, *umbo* shieldboss.] Lying on the back near the umbil.

**dorsoventral** (dōr'sōvēn'trāl) *a.* [L. *dorsum* back *venter* belly.] *Pert.* structures which stretch from dorsal to ventral surface of dorsoventral

**dorsulum** (dōr'sōlūm) *n.* [Dim of L. *dorsum* back.] Upper surface lying between collar and scutellum mesonotum.

**dorsum** (dōr'sūm) *n.* [L. *dorsum* back.] The sulcular surface of Anthozoa i tegum or notum of insect and crustaceans i inner

margin of insect wing the back of higher animals.

dorylaner (dôr'ilânër) *n.* [Gk. *dory* spear *aner* male.] An exceptionally large male ant of driver-ant group.

doubleure (doo'bülür) *n.* [F *doubleure* lining.] The reflected margin of carapace in Trilobita and Xiphosura.

Doyër cone ([L. *Doyère* French physiologist]. End plate or eminence where nerve fibre branches and enters sarcolemma.

dr panium (drép'ä nüm) *n.* [Gk. *drepanon* sickle.] A helicoid cyme with secondary axes developed in plane parallel to that of main peduncle and its first branch.

drift (drift) *n.* [A.S. *drifan*, to drive.] Transported *opp.* bed-rock, soils process of change in gene frequencies in a population of breeding individuals; Sewall Wright effect genetical-automatic process.

dromaeognathous (dröm edg' nãthūs) [Gk. *dromaeos* to run *gnathos* jaw] Having a palate in which palatines and pterygoide do not articulate, owing to intervention of vomer

dromotropi (dröm otröp'itē) *n.* [Gk. *dromos* course *tropē* turn.] Bent in spiral influencing curve conductivity

drone (drön) *n.* [A.S. *drone*.] The male bee.

dropper (dröp'er) *n.* [A.S. *dræpan*, to drop.] Rhizomatous downward outgrowth of bulb which may form a new bulb.

drupaceous (droop'ä shūs) *n.* [Gk. *drypa*, olive.] *Perr* drupe bearing drupe drupe-like.

drupe (droop) *n.* [Gk. *drypa*, olive.] A superior one-celled fruit with one or two seeds and the pericarp differentiated into a thin epicarp fleshy sarcocarp, and hard endocarp, as of plum.

drupal (droop'el) *n.* [Gk. *drypa*, olive.] An individual component of aggregate fruit, as of raspberry also drupelet.

dry (drif) *a.* [A.S. *dryge* dry] *Appl* achenial capsular and schizocarpic fruits. *Opp* succulent.

drymophytes (drif'mófitē) *n* *plu* [Gk. *drymas* coppice *phyton* plant.] Small trees, bushes, and shrubs.

duct (dükt) *n.* [L. *ducere* to lead.] Any tube which conveys fluid or other substance a tube formed by a series of cells which have lost their walls at the points of contact ductus.

d cileous glands,—glands which do not communicate with any organ directly by means of a duct endocrine organs.

ductule (dük'tül) *n.* [L. *ducere* to lead.] A minute duct fine thread like terminal portion of a duct.

d ctus (dük'tūs) *n.* [L. *ducere* to lead.] Duct, *q.s.*

ductus deferens,—vas deferens.

ductus jaculatorius,—a narrow muscular tube at end of vas deferens in various invertebrates.

Dufour' gland [L. *Dufour* French entomologist]. An alkaline gland with duct leading to terebra or sting of certain Hymenoptera.

duloids (dü'lóidē) *n.* [Gk. *duleis* subjugation.] Slavery among ants.

dumb-bell bone,—prevomer *q.s.*

duodenal (dü'ódē'nál) *n.* [L. *duodeni* twelve each.] *Perr* duodenum.

duodenum (dü'ódē'nüm) *n.* [L. *duodeni* twelve each.] That portion of small intestine next to pyloric end of stomach.

d plex (dü'plēks) *n.* [L. *duplex* two-fold.] Double compound, *appl* flowers diploid having two dominant genes, in polyploidy consisting of two distinct structures having two distinct parts.

d plication (dü plik'ä shün) *n.* [L. *duplex* double.] Choriem, *q.s.* translocated chromosome fragment attached to one of normal set.

duplicature (dü'plikätür) *n.* [L. *duplex* double.] A circular fold near base of protrusible portion of polyzoon polypide.

**duplicident** (dŭplɪs'ɪdənt) *n.* [L. *duplex* double *dens* tooth] With two pairs of incisors 1 upper jaw one behind the other

**duplicity** (dŭplɪs'ɪtɪ) *n.* [L. *duplex* double] Condition of being two-fold *appl.* theory that cones are the photopic, or colour receptors, and rods the scotopic or brightness receptors.

**duplicodontat** (dŭplɪkŏdɛnt'at) *n.* [L. *duplex* double *dens* tooth.] With marginal teeth on leaf bearing smaller teeth-like structures.

**dura mater** (dŭrā māt'ər) *n.* [L. *dura*, hard *mater* mother] The tough membrane lining the whole cerebro-spinal cavity

**dura spinalis**,—the tough membrane lining the spinal canal.

**dural** (dŭrāl) *n.* [L. *dura* hard.] *Peri.* dura mater *appl.* sheath of optic nerve.

**duramen** (dŭrā mēn) *n.* [L. *durare* to harden.] The hard darker central region of tree-stem the heart wood.

**downy** (dŭv'ə) *n.* [F. *downy* down] Downy coating as soft matted out by certain fungi

**dwarf mite**—small three or four celled plant formed from androspore of Oedogonium small usually singly formed individual in many classes of animals, either free or carried by the female

**dyad** (dɪ'ad) *n.* [Gk. *dyas* two] The half of tetrad group bivalent chromosome.

**dynamic** (dɪnām'ɪk) *n.* [Gk. *dynamis* power] Producing or manifesting activity *opp.* static *appl.* specific dynamic action the calorigenic action of food increasing metabolism above basal rate

**dynamoplastic** (dɪnāmŏplās'tɪk) [Gk. *dynamis* power *plastikos* formed.] *Appl.* active type of coenogam product *opp.* paraplasmic

**dyogeni** (dɪjə'ɪn) *n.* [Gk. *dyogenes* low birth] *Peri.* tending towards, or productive of racial degeneration *nekrogenic* *pp.* *neugenic*

**dysmerism** (dɪs mērɪzəm) *n.* [Gk. *dys* mis- *meros* part.] An aggregate of unlike parts.

**dysmerogenesis** (dɪs mērjən'əsɪs) *n.* [Gk. *dys* mis- *meros* part *genesis* descent.] Segmentation resulting in unlike parts.

**dysphoti** (dɪs fŏt'ɪk) *n.* [Gk. *dys* mis- *phos* light.] Dim *appl.* one waters at depths between 80 and 600 metres, between euphotic and aphotic zones *g.s.* lower layer of photic zone

**dysploid**—aneuploid, *g.s.*

**dyspnoea** (dɪspnē'ə) *n.* [Gk. *dyspnoea* breathless.] Difficulty in breathing

**dysteleology** (dɪst'elɛŏlŏj'ɪ) *n.* [Gk. *dys* mis- *telos* ended *logos* discourse.] Haeckel's doctrine of purposelessness in Nature appearance of uselessness as of certain organs or other structures frustration of function.

**dystrophic** (dɪstrŏf'ɪk) *n.* [Gk. *dy* mis- *trophen* to nourish] Wrongly or inadequately nourished inhibiting adequate nutrition *peri.* faulty nutrition.

**Dzi rzon theory** [J. *Deism*, Silesian apiculturist]. Belief that males of honey bee are always produced from unfertilised eggs.

## E

**ear** (ɛr) *n.* [A.S. *ear*] The auditory organ among vertebrates the various structures supposed to have an auditory function the specialised tufts of hair or feathers which are close to, similar to an external ear *peri.* ear shaped structure the spike of grasses usually of cereals.

**eared** (ɛrd) *n.* [A.S. *ear*] Having external ears or pinnas with tufts of feathers resembling ears having long bristles or processes, as in grains of corn *unculata*

**ebracteate** (ɛbrāk'tēāt) *n.* **ebracteolate** (ɛbrāk'tēŏlāt) *n.* [L. *ex* out of *bractea* thin plate] Without bracts; without bracteoles

**ecad**—occad *g.s.*

ecalcarate (Ekál'kárls) *n.* {*L.* *x* out of colour spur} Having no spur or spo like process.  
 ecardinal (Ekár'dínál) *n.* {*L.* *x* out of cards hinge.} Having no hinge also ecardinate.  
 carinal (Ekár'tárl) *n.* {*L.* *x* out of carine keel.} Not furnished with keel or keel-like ridge.  
 caudate (Eká'dárl) *n.* {*L.* *x* out of cauda tail.} Without a tail.  
 chlaetosis (Ek'blástárls) *n.* {*Gk.* *chlai* out of slender bod.} Proliferation of main axis of inflorescence.  
 eceritic (Ekér'tík) *n.* {*Gk.* *ekheris* to expel to select.} Causing or *per* excretion preferred, *appl* temperature etc.  
 e il al (Ekélm'ík) *n.* {*Gk.* *chlai* out of *ekheris* people.} Not native.  
 eoderon (Ek éderón) *n.* {*Gk.* *chlai* out of *ekheris* skin.} The outer or epidermal layer of skin.  
 eoderonic (Ekédrón'ík) *n.* {*Gk.* *chlai* out of *ekheris* skin.} Ectodermic epiblastic.  
 eodysial (Ekédrón'ík) *n.* {*Gk.* *chlai* out of *ekheris* to strip.} *Per* eodysial *appl* fluid between old and new cuticle which aids in disintegration of old cuticle moulting fluid *appl* line along which cuticle splits in moulting *appl* glands, Vernon glands, secreting moulting fluid.  
 eodysid (Ek édrón'ík) *n.* {*Gk.* *chlai* out of *ekheris* to strip.} The act of moulting a cuticular layer or structure of endysia.  
 etc.—*take. p. v.*  
 eodisid, —*take. p. v.*  
 eohard (Ekárd') *n.* {*Gk.* *ekheris* to keep *ard* 1 water} Soil water not available for pla t growth of chardard, hohard.  
 echinate (Ek'ínárl) *n.* {*Gk.* *ekheris* hedgehog.} Furnished with spines or bristles.  
 echinose (Ekín'éón) *n.* {*Gk.* *ekheris* sea-urchin.} A carotenoid pigment of sea-urchin grounds, provitamin A.  
 echinochr *m.* (Ek'ínókrón) *n.* {*Gk.* *ekheris* sea urchin *chrónos*,

colour.} A red-brown respiratory pigment of echinodermus  $C_1 H_2 O_2$ .  
 echinococcus (Ek'ínókok ós) *n.* {*Gk.* *ekheris* spine *kokkos* berry.} A vesicular metacystode developing a number of daughter cysts each with many heads.  
 echinoid (Ek'ínóid) *n.* {*Gk.* *ekheris* sea-urchin *oid* form.} *Per* or like sea-urchins.  
 echinopodium (Ek'ínópód'íón) *n.* {*Gk.* *ekheris* sea-urchin *pódion* young child.} *Dipterula, p. v.*  
 chinopitens (Ek'ínópítón'tón) *n.* {*L.* *ekheris* sea-urchin *pítens* shed.} Larva or pitens of echinoids from supposed resemblance to an upturned ead.  
 echinulate (Ekín'úárl) *n.* {*Gk.* *ekheris* spine.} Having small spines having pointed outgrowths, *appl* bacterial cultures.  
 echolocation (Ek'ínóloká'shón) *n.* {*L.* *ekheris* echo *locare* to place.} Location of objects by means of echos, as of supersonic sounds emitted by animals, & by bats.  
 eclyps (Eklyps) *n.* {*Gk.* *ekheris* to leave incomplete.} Plumage assumed after spring moult as in drake.  
 eclusion (Ek'ín'úshón) *n.* {*L.* out *ekheris* shut.} Hatching from an egg or imago  
 co.—*see also* eeco- otko-  
 ecoblot (Ek'ínóblót'ík) *n.* {*Gk.* *ekheris* household *blotos* manner of life.} *Appl* adaptation to particular mode of life within a habitat.  
 eod m (Ek'ódém) *n.* {*Gk.* *ekheris* household *domos* people.} A deme occupying particular ecological habitat.  
 eod, —*see also*, *p. v.*  
 eol gy (Ekól'óyl) *n.* {*Gk.* *ekheris* household *logos* discourse.} That part of biology which deals with relationship between organisms and their surroundings, bionomics.  
 economic density,—of a population, the number of individuals per unit of the inhabited area, *appl* population density in an area only partly inhabited.



ecostate (ékôs iât) *a* [L. *e* out  
aria rib] Without costae not  
costate.

ecosystem (ékôsis tsm) *n* [Gk.  
*oikos* household *systema*  
composite whole.] Ecological system  
formed by the interaction of co-  
acting organisms and their environ-  
ment.

cotone (ékôtôn) *n*. [Gk. *oikos*  
household *tonos* brace] A transi-  
tional species in intermediate area  
between two associations the  
boundary line transitional area  
between two communities.

ecotope (ékôtóp) *n* [Gk. *oikos*  
household *topos* place] A par-  
ticular kind of habitat within  
region.

ecotype (ékôtíp) *n* [Gk. *oikos*  
household *typos* pattern] A  
biotype resulting from selection  
in particular habitat habitat  
type.

ecphoria (ékôfô riâ) *n*. [Gk. *ekphorion*  
produce.] The revival of a latent  
memory pattern or engram.

ecsona (ékôð mã) *n*. [Gk. *ek* from  
out of *soma*, body] Retractable  
posterior part of body in certain  
trematodes.

ectad (ék iád) *adv* [Gk. *ektas* out-  
side L. *ad* towards] Towards  
the exterior outwards externally  
*Opp* entad

ectadenia (ék iádê niâ) *n pl* [Gk.  
*ektas* outside *aden* gland] Ecto-  
dermal accessory genital glands in  
insects of mesadenia

ectal (ék iâl) *a*. [Gk. *ektas* outside] *Opp*  
external *appl* layer or  
membrane on margin of exciple  
*Opp* ental.

ectamni *n* (éktâm niôn) *n* [Gk.  
*ektas* outside *amnion* foetal  
membrane] Ectodermal thickening  
in promnion, beginning of  
head fold

ect endotrophic (ék'têndôtroph'ik) *a*  
[Gk. *ektas* without *endon* within;  
*trophê* nourishment] Partly ecto-  
trophic and partly endotrophic, *appl*  
mycorrhizic fungus

ectental line,—the line where ecto-

derm and endoderm meet at bl co-  
pore of gastrula.

ectepicondylar (ék'tépikôn dílar) *a*  
[Gk. *ektas* outside *epi* upon  
*condyl* knob.] *Appl* radial  
foramen of humerus.

ectethmoid (ék'têth môid) [Gk.  
*ektas* outside *ethmos* sieve *oides*  
form.] Lateral ethmoid bone.

ecthoraeum (ék'thôrê um) *n* [Gk.  
*ekthraein* to leap out.] The  
thread of a nematocyst.

ectoblast (ék'tôblást) *n* [Gk. *ektas*  
outside *blastê* bud.] Epiblast,  
*q*

ectobrancheus (ék'tôbrâng'kts) *n*  
[Gk. *ektas* outside *branchos*  
windpipe] Lateral branch of  
main bronchus in birds also  
ectobronchium.

ectocarpon (ék'tokâr'pôs) *a*. [Gk.  
*ektas* outside *karpos* fruit.]  
Having gonads of ectodermal origin.

ectochondrostosis (ék'tôkôndrô-  
stô'sis) *n* [Gk. *ektas* outside  
*chondros* cartilage *stoma* bone]  
Deposition of lime-salts beginning  
perichondrium and gradually  
invading cartilage.

ectochone (ék'tokô ô) *n*. [Gk. *ektas*  
outside *chone* funnel.] A  
funnel-shaped chamber into which  
lead the osia certain sponges.

ectocoell (ék'tosê'tik) *a*. [Gk. *ektas*  
outside *koilos* hollow] *Pert*  
structures situated outside the en-  
teron of coelenterates.

ectocondyle (ék'tokôn dí) *n* [Gk.  
*ektas* outside *condyl* knob.]  
The outer condyle of bone.

ectocranial (ék'tôkrâ niâl) *a*. [Gk.  
*ektas* outside *kranion* skull.]  
*Pert* outside of sk ll.

ectocu aliform (ék'tôkô ê'tôrm) *n*  
[Gk. *ektas* outside L. *cornus*  
wedge *forma* shape] A bone in dis-  
tal row of tarsus th rd cuneiform.

ectocyst (ék'tôlist) *n* [Gk. *ektas*  
outside *kystis* bladder] Outer  
layer f zoecium *Polyzoa*  
outer covering of encysted Proto-  
zoa epicyst

ectod *m* (ék'tôdêrm) *n* [Gk. *ektas*  
outside *derma* skin.] The outer

- layer of a multicellular animal the epidermis in higher mammals.
- ecto-ethmoid.—ectethmoid *g*.
- ectogensis (ek'tōjən čns) *n* [Gk. *ektō* outside; *genesis* descent.] Embryonic development outside the maternal organism development in an artificial environment.
- ectogenesis (ek'tōjən čns) *n* [Gk. *ektō* outside *genesis* birth] Able to live an independent life originating outside the organism.
- ectoglia (ek'tōglj'ā) *n* [Gk. *ektō* outside *glia* glue.] An outer layer in central nervous system.
- ectolecithal (ek'tōlčs'thal) *n* [Gk. *ektō* outside *lethē* yolk of egg] Having yolk surrounding formative protoplasm.
- ectoloph (ek'tōlōf) *n* [Gk. *ektō* outside *lōphos* crest.] The ridge stretching from paracone to metacone in lepidodont molar.
- ectomer (ek'tōmər) *n* [Gk. *ektō* outside *meros* part] An epiblast cell which gives rise to ectoderm.
- ectomy (ek'tōm) [Gk. *ektō* out *temno* to cut.] Suffix signifying an excision, *g* thyroidectomy gonadectomy etc.
- ectoneural (ek'tōnəl'ral) *n* [Gk. *ektō* outside *neurōn* nerve.] *Appl* system of oral ring radial and subepidermal nerves in echinoderm.
- ectoparasite (ek'tōpər'āsīt) *n* [Gk. *ektō* outside *para* beside *sites* food.] A parasite that lives on the exterior of an organism.
- ectopetragium (ek'tōpətr'ājəm) *n* [Gk. *ektō* outside *L. petragium* border] The part of the wing-like membrane of bats which is carried on metacarpals and phalanges.
- ectophyte (ek'tōfīt) *n* [Gk. *ektō* outside *phytōn* plant] An external plant parasite.
- ectopic (ek'tōp'ik) *n* [Gk. *ektō* out of *topos* place] Not in normal position *appl* organ gestation etc. *Opp* ectopic.
- ectopic pairing,—pairing between bands located in different regions of chromosome.
- ectoplasm (ek'tōplāzm) *n* [Gk. *ektō* outside *plasma* mould] The external layer of protoplasm in a cell usually modified ectonarc of protozoan cell layer next cell-wall.
- ectoplast (ek'tōplāst) *n* [Gk. *ektō* outside *plastēr* formed.] The protoplasmic film or plasma-membrane just within the true wall of a cell.
- ectopterygoid (ek'tōptēr'igōid pōt) *n* [Gk. *ektō* outside *ptērux* wing *oides* form.] A ventral membrane bone behind palatine and extending to quadrate mesopterygoid or transversum between pterygoid and maxilla in many reptiles and in some babies of entopterygoid.
- ectonarc (ek'tōnārk) *n* [Gk. *ektō* outside *narc* flesh.] The external layer of protoplasm in a protozoan.
- ectosoma (ek'tōsōm) *n* [Gk. *ektō* outside *sōma* body] The enveloping portion of a sponge containing no flagellated chambers type of cell granule.
- ectospher (ek'tōsfēr) *n* [Gk. *ektō* outside *sphaira* globe.] The outer zone of attraction sphere.
- ectospora (ek'tōspōr) *n* [Gk. *ektō* outside *spora* seed] The spore formed at end of each sterigma in Basidiomycetes.
- ectostosis (ek'tōstō'sis) *n* [Gk. *ektō* outside *stasis* bone] Formation of bone in which ossification begins under the perichondrium and either surrounds or replaces the cartilage.
- ectotheca (ek'tōthē'kē) *n* [Gk. *ektō* outside *thēkē* cup.] Outer coating of gonotheca in certain hydrozoa.
- ectotrachea (ek'tōtrākē'ā) *n* [Gk. *ektō* outside *L. trachea*, wind-pipe] An epithelial layer on outer side of insect tracheae.
- ectotroph (ek'tōtrōf'ik) *n* [Gk. *ektō* outside *trophēn* to nourish.] Finding nourishment from outside *appl* fungi which surround roots of host with hyphae. *Opp* endotrophic.

**ectoturbinal** (ék tótúr'bínál) *n.* [Gk. *ektos* outside L *turbo* whirl] A division of the ethmoid rhinal

**ecto-oon** (ék'tóó's ón) *n.* [Gk. *ektos* outside *oon* animal.] An external animal parasite epizoon.

**ecumene** (ék'úmén ə) *n.* [Gk. *oikoumenē* habitabl world.] Any inhabited region the biosphere.

**edaphic** (édáf'ík) *a.* [Gk. *edaphos* ground.] Part or influenced by conditions of soil or substratum.

**edaphology** (édáf'ól'ójí) *n.* [Gk. *edaphos* ground *logos* discourse.] Soil science particularly the study of the influence of soil on living organisms of pedology

**edaph n** (édáf'ón) *n.* [Gk. *edaphos* ground.] The organisms living within the soil soil flora and fauna.

**edentate** (édé'tit) *a.* [L *ex* without *dens* tooth] Without teeth or tooth-like projections.

**edestin** (édés'tín) *n.* [Gk. *edestes* eatabl] A plant globuli main protein of sunflower and certain other seeds.

**edri phthalmic** (éd ríofthál mík) *a.* [Gk. *edra* eyes *phthalmos* eye.] Having sessile eyes *apl.* certain Crustacea.

**effector** (éfék'tór) *n.* [L *effere* to carry out] An organ which reacts to stimulus by producing work or substance as muscle electric and l minous organs, glands motor end-organ in muscle.

**effluent** (éf'erént) *a.* [L *ex* out *ferre* to carry] Conveying from *apl.* vessels lymphatics etc. carrying outwards, *apl.* impul ses carried outward by motor nerves.

**efflorescenc** (éf'lorés ns) [L. *efflorere* to blossom.] Blossoming time of flowering bloom.

**effoliation** (éf'ólíá shún) *n.* [L. *ex* out of *fol* *m* leaf] Shedding or removal of leaves

**effuse** (éf'ús) [L. *effusus* poured out.] Spreading loosely *apl.* n-florescence spreading thinly *apl.* bacterial cultures.

**egest** (éjést') *v.* [L *ex* out *gerere* to carry] T throw out to void to excrete.

**egesta** (éjés'tá) *n. pl.* [L. *egestas* discharged.] The sum-total of substances and fluids discharged from body

**egg** (ég) *n.* [A.S. *eg* Icel. *egg*] The matured female germ-cell ovule.

**egg-albumin**,—the chief constituent of white of egg a mixture of glucoproteins.

**egg-apparatus**,—the two synergids and ovum proper bear micropyle in embryo-sac of seed plants.

**egg-case**,—a protective covering for eggs.

**egg-cell**,—the ovum proper part from any layer of cells derived from it or from other cells.

**egg membrane**,—the layer of tough tissue lining an egg shell.

**egg n cle s**,—the female pronucleus.

**egg tooth**,—a small structure on tip of upper jaw or f beak, by which the embryo breaks its shell

**eloid** (ríoid) *a.* [Gk. *elios* t roll *p* *eloides* form.] Shaped like coil

**ejaculate** (éják'ólít) *n.* [L. *ejaculo* thrown out.] The emitted seminal fluid

**ejaculatory** (éják'ólít rí) *a.* [L. *ejaculare* to throw out.] Throwing out *apl.* certain ducts.

**ejaculatory sac**,—organ pumping ejaculate from vas deferens through ejaculatory duct to penis, certain insects.

**elaborat** (éláb'orát) *v.* [L. *elaborare* to work out.] T hange from crude stat to stat capable of assimilation t form complex organic substances from simple materials

**elae blast** (élé'óblást) [Gk. *elaios* oil *blastos* bud.] A mass of nutrient material t posterior end of body in certain tunicates.

**ela ocyt** (élé'óyt) [Gk. *elaios* oil *kytos* hollow] A cell containing fatty droplets, found i coelomic fluid of annelid

**inodochon** (ἐνὸδ ὅκον) *n* [Gk. *enodochos* oil-containing.] The preen-gland or oil-gland in birds.

**elaioplast** (ἐλαιοπλαστ) *n* [Gk. *elaion* oil *plastos* moulded.] A plastid in a plant cell which forms or helps to form oil globules.

**elaisome**,—**elaioplast**.

**elaisopher** (ἐλαιοφῆρ) *n* [Gk. *elaion* oil *pheros* globe.] An oil globule in a plant cell.

**elastic fibro-cartilage**—consists of cartilage cells and matrix pervaded by a network of yellow elastic fibres which branch and anastomose in all directions.

**elastica externa**,—external layer of notochordal sheath.

**elastica interna**,—the ephibellomorph layer of notochordal cells.

**elastin** (ἐλαστίν) *n* [Gk. *elasterein* to draw.] The sclero-protein of which elastic fibres are composed.

**elater** (ἐλάτηρ) *n*. [Gk. *elater* driver.] One of cells with a spiral thickening which assist in dispersing spores from capsules in liverworts. One of spore appendages formed from episports in horsetails.

**elaterophore** (ἐλαιοτῆρας) *n*. [Gk. *elater* driver *pheros* to bear.] Those bearing the elaters, in some liverworts.

**elctosome** (ἐλκτοσώμ) *n* [Gk. *elktois* chaste *soma*, body.] A chondriosome regarded as a centre for elaborating and fixing chemical constituents of protoplasm.

**electric organ**,—modifications of muscles or groups of muscles which discharge electric energy found in certain fishes.

**electropendomecel** *lays*—a hypothetical membrane present between two neurones or between neurone and muscle cell.

**electrolenax** (ἐλκ τρολέμ) *n* [Gk. *elektron* amber *lenax* skin.] Membrane surrounding an electroplex.

**lectr phoresis** (ἐλκ τροφοφῆσις) *n* [Gk. *elektron* amber *phoresis* to

bes.] Transport of substances as of colloidal particles resulting from differences in electrical potential.

**lectr plasm**,—**electrotropism** *q.v*

**electr plax** (ἐλκ'τροπλάξ) *n*. [Gk. *elektron* amber *plax* plate.] One of the constituent plates of an electric organ.

**electrotaxis** (ἐλκ'τροτάξις) *n*. [Gk. *elektron* amber *taxis* arrangement.] Orientation of movement within an electric field.

**electrotonic** (ἐλκ'τροτόνικ) *n*. [Gk. *elektron* amber *tonos* tension.] Part a state of electric tension.

**electrotonus** (ἐλκ'τροτόνισ, *Elektron ton*) *n*. [Gk. *elektron* amber *tonos* tension.] The modified condition of a nerve when subjected to a constant current of electricity.

**lectr tropism** (ἐλκ'τροτρόπισμ) *n*. [Gk. *elektron* amber *tropis* turn.] Reaction of an organism to electric stimuli. plant curvature in an electric field.

**eloidia** (ἐλιδίν) *n*. [Gk. *elais* olive.] Substance found as small granules or droplets in stratum granulosum of epidermis.

**elso**—*see* elaco-elalo-

**leutherodactyl** (ἐλ'θηρὸδᾶκ'τύλ) *n*. [Gk. *eleutheros* free *dactyl* finger.] Having hind toe free.

**leutheropetalous** (ἐλ'θηρὸπέτ' αλ'ος) *n*. [Gk. *eleutheros* free *petalon* petal.] Having petals or components of whorl free or separate.

**leutherophyllous** (ἐλ'θηρὸφύλ'ος) *n*. [Gk. *eleutheros* free *phyllon* leaf.] Having components of perianth whorls free.

**leutherosepalous** (ἐλ'θηρὸσέπ' αλ'ος) *n*. [Gk. *eleutheros* free *sepal* sepal.] Having sepals free or separate.

**levator** (ἐλ'εβάτωρ) *n* [L. *elevar* to lift up.] Any muscle which raises a part.

**eliquat** (ἐλιγ'αλ'ατ) *n*. [L. *ex* out *lingua*, little tongue.] Having no tongue; *appl* certain club-mosses

elimination bodies,—nucleic acid material expelled from each chromosome during meiosis, remaining in middle of spindle and disintegrating during telophase.

elliptical (ɛlɪp'tɪkəl) *a.* [Gk. *ellipsis* falling short.] Oval-shaped

*appl.* leaves of about same breadth at equal distances from base and apex, which are slightly acute.

eluvial (ɛlʊ'vɪəl) *a.* [*L.* *ex* out *luere* to wash.] *Appl.* leached upper layers or A horizon of soil.

elytriform (ɛlɪ'trɪfɔrm) *a.* [Gk. *elytron* sheath *L. forme* shape.] Shaped like an elytrium.

elytroid (ɛlɪ'trɔɪd) *a.* [Gk. *elytron* sheath *oides* resemblance.] Resembling an elytrium.

elytrium (ɛlɪ'trɪəm) *n.* [Gk. *elytron*, sheath.] The anterior wing of certain insects hard and case-like one of scales or shield-like plates found on dorsal surface of some worms also elytron.

emarginate (ɛmər'ʤɪnət) *a.* [*L.* *ex* out *margine* to delimit.] Having a notch at apex having notched margin.

embols (ɛm'bɔlə) *n.* [Gk. *embolē* a throwing in.] Invagination also emboly

embolic (ɛm'bɔlɪk) *a.* [Gk. *embolē* throwing.] Pushing or growing *a.*

embolium (ɛm'bɔlɪəm) *n.* [Gk. *embolē* wedge.] Outer or costal part of wing or basal part of hemelytron, in certain insects.

embolomorous (ɛm'bɔləm'ɔrəs) *a.* [Gk. *embolē* wedge *moros* part.] Having two vertebral rings in each segment, due to union of hypocentra with neural arch and union of two pleurocentra below notochord

embol *a.* (ɛm'bɔləs) *n.* [Gk. *embolē* wedge.] Apical division of the palpus in certain spiders *a.* clot blocking a blood-vessel

embryo (ɛm'briə) *n.* [Gk. *embryon* embryo.] A young organism in early stages of development before it becomes self-supporting

embryo cell,—one of two cells formed from first division of fertil-

ised egg in certain plants, developing later into embryo the other developing into suspensor

embryogenesis (ɛm'briəʤən'ɛsɪs) *n.* [Gk. *embryon* embryo *genesis* descent.] Origin of the embryo

embryogeny (ɛm'briəʤənɪ) *n.* [Gk. *embryon* embryo *genesis* to produce.] The processes by which the embryo is formed origin, cellular pattern, and functions of the embryo.

embryology (ɛm'briəʤɪ'ɔləʤɪ) *n.* [Gk. *embryon* embryo *logos* discourse.] That part of biology dealing with formation and development of the embryo.

embryonal knot,—inner cell mass of blastodermic vesicle.

embryonic (ɛm'briəʤɪ'nɪk) *a.* [Gk. *embryon* embryo.] Pert. embryo.

embryon my (ɛm'briəʤən'mi) *n.* [Gk. *embryon* embryo *nomos* law.] The laws of embryonic development; classification of embryos. *a.* Embryonomic.

embryophore (ɛm'briəʤɪ'fɔr) *n.* [Gk. *embryon* embryo *phorion* to bear.] Ciliated mantle enclosing embryo in many tape-worms, and formed from superficial blastomeres of embryo.

embryophyta (ɛm'briəʤɪ'fɪtə) *n. pl.* [Gk. *embryo* embryo *phyton* plant.] Plants having an enclosed embryo as those with an archegonium or bearing seeds.

embryo-sac,—the megasporangium female gametophyte in angiosperms.

embryot ctonics (ɛm'briəʤɪ'kɔnɪk's) *n.* [Gk. *embryon* embryo *tekton* builder.] The structure or cellular pattern of the embryo.

embryotega (ɛm'briəʤɪ'ɛgə) *n.* [Gk. *embryon* embryo *tege* roof.] Small hardened portion of testa which marks micropyle in some seeds and separates like little lid at period of germination.

embryotrophy (ɛm'briəʤɪ'rɔʤɪ) *n.* [Gk. *embryon* embryo *trophe* nourishment.] Nourishment of embryo or means adapted therefor

**en-g-nce** (énér'jén) *n* [*L. ex* out *mergere* to dip] An outgrowth from subepidermal tissue an epidermal appendage.

**emersed** (émér's) *a* [*L. ex* out *mergere* to dip] Rising above surface of water *apple leaves*.

**eminence** (ém'ínés) *n* [*L. eminent* eminent.] Ridge or projection on surface of bones *cranium*.

**emissary** (ém'isér) *a*. [*L. emittere* to send out.] Coming out name *apple veins* passing through apertures in cranial wall and establishing connection between sinuses inside and veins outside.

**emmenal** (ém'éna) *n* [*Gk. emmenae* monthly] A placental gonadotrophic hormone.

**empodium** (ém'pó'diúm) *n* [*Gk. en* in *pus* foot.] A small variable median structure between claws of feet in many insects.

**emulsin** (émú'sín) *n* [*L. emulgere* to milk out.] A hydrolytic enzyme found in certain plants and some invertebrates.

**enamel** (énám'él) *n* [*OF emallier* to coat with enamel.] The hard material coating over 90 per cent. calcium and magnesium salts which forms a cap over dentine or may form a complete coat to tooth or scale.

**enamel cells**,—cells which form enamel, collectively the enamel organ *adamantoblasts, ameloblasts*.

**antibiosis** (án'tiob'í'sis) *n* [*Gk. antios* opposite *bios* life.] Antagonistic symbiosis.

**antiblastic** (án'ti'blás'tík) *a*. [*Gk. antios* opposite *blastos* bud.] Formed at end of seed opposite placenta.

**antimorphic** (án'ti'mór'fík) *a* [*Gk. antios* opposite *morphe* form.] Similar but contraposed as mirror image right and left hand deviating from normal symmetry.

**arthrosis** (én'árthró'sis) *n* [*Gk. en* in *arthron* joint.] Ball-and-socket joint.

**anation** (éná'shín) *n* [*L. anatus* grown from.] A non-reproductive

accessory part emerging from surface of telome outgrowth from a previously smooth surface.

**encephalisation** (énkéf'álí'shén, -séf) *n*. [*Gk. encephalios* brain.] Brain formation by the forward shifting and centralising tendency of co-ordinating neurones.

**encephalocoel** (énkéf'álé'kél -séf) *n* [*Gk. encephalios* brain *kóilos* hollow] Cavity within the brain; cerebral ventricle, the anterior dilatation of neurocoel.

**encephalomers** (énkéf'álém'séf) *n* [*Gk. encephalios* brain *meros* part.] A brain segment.

**encephalon** (énkéf'álón, -séf) *n* [*Gk. encephalios* brain.] The brain.

**encephalospinal** (énkéf'álé'pí'nál -séf) *a*. [*Gk. encephalios* brain *L. spina, spine*.] Part brain and spinal cord.

**enchondral**,—**enchondral** intra-cartilaginous *g.s*.

**enchylema** (énkilé'má) *n*. [*Gk. en* in *chyle* juice.] The more fluid portion of a cell cell sap.

**secretion** (énkré'shén) *n*. [*Gk. en* within *kraino*, *L. cernere* to put apart.] Endocrine secretion hormone.

**encyst** (éníst) *v* [*Gk. en* in *kytis* bladder] Of a cell or small organism, to surround itself with an outer coat capsule.

**encystation** (énístá'shén) *n* [*Gk. en* in *kytis* bladder] Formation of a firm, resistant envelope or capsule.

**endarch** (énd'árk) *n*. [*Gk. endon* within *arche* beginning] With central protoxylem, or with several surrounding a central path.

**endaspidean** (énd'áspí'déin) *a* [*Gk. endon* within *aspis* shield.] With scutes extending on inner surface of tarsus.

**nd-brain**,—**telencephalon**, *g.s*.

**nd-bulba**,—minute cylindrical or oval bodies, consisting of capsule containing a semi-fluid core in which axis cylinder terminates either in a bulbous extremity or in a coiled platiform mass.

- end cell — a cell incapable of further differentiation.
- endemic (éndēm'ík) *a.* [Gk. *endēmos* native.] Restricted to a certain region or part of a region.
- enderon (én dērō' *n.* [Gk. *en*, in; *deris* skin.] Th. inner or endodermal layer
- enderonic (én dērōn'ík) *a.* [Gk. *en* in *deris* skin.] Endodermal.
- endites (énditē) *n. plu* [Gk. *endon* within.] Offshoots on mesial border of certain appendages f. arthropoda.
- endo- — see also ento-
- endobasal (én dōbā'sāl) *a.* [Gk. *endon* within *basis* base.] *Appl* body the kinetic element of central intranuclear structure of endosome
- endoblast (én dōblāst) *n.* [Gk. *endon* within *blastos* bud.] Hypoblast coeloblast and myoblast.
- endocardia (én dōkār'dīāk) *a.* [Gk. *endon* within *kardia* heart.] Situated within the heart endocardial
- endocardium (én dōkār'dīām) *n.* [Gk. *endon* within *kardia*, heart.] The membrane which lines inner surface of heart.
- endocarp (én dōkār'p) *n.* [Gk. *endon* within *karpus* fruit.] The inner most layer of pericarp usually hard in drupaceous fruits
- endocarpoid (én dōkār'pōid) *a.* [Gk. *endon* within *karpus* fruit *eidos* form.] H. ring the disc-like sarcocarp embedded in the thallus
- endochiton (éndōkī'tōn) *n.* [Gk. *endon* within *chiton* coat.] Inner most layer of oegonial wall as in Fucales endochite other layers exochiton mesochiton.
- endochondral (én dōkōn'drāl) *a.* [Gk. *endon* within *chondros* cartilage.] Beginning or forming inside the cartilage *appl* ossification of perichondral.
- endochondrostosis (én dōkōndrō'stōsis) *n.* [Gk. *endon* within *chondros* cartilage *osteon* bone.] Ossification cartilage from within outwards.

- endoch *n.* (én dōkōnē) *n.* [Gk. *endon* within *chaos* funnel] Spacious sub-cortical crypt in sponge tissue, from which arise incurrent canals.
- endochorion (én dōkō'riōn) *n.* [Gk. *endon* within *chorion* chorion.] Inner lamina of chorion of insect eggs.
- endochrome plate, — a band of yellowish chromatophores found in protoplasmic portion of certain diatoms.
- endochromidia (én dōkrōmīd'ia) *n. plu* [Gk. *endon* within *chroma* colour *idia* disc] Metachromatic corpuscles, formed from colloidal solution of metachromatin.
- endochylous (én dōk'īlōs) *a.* [Gk. *endon* within *chylas* juice.] With water-cells within internal tissue.
- endocoelar (én dōsē'lār) *a.* [Gk. *endon* within *koelas* hollow] *Fert* inner wall f. coelom or splanchnopleure.
- endocoeli (én dōsē'līk) *a.* [Gk. *endon* within *koelas* hollow] I sea-anemones, *appl* radial area on disc covering space between two mesenteries of the same pair *appl* inner cycle or cycles of tentacles, *opp* exocoelic.
- endocone (én dōkōn) *n.* [Gk. *endon* within *konos* cone.] A conical structure formed in certain cephalopod shells
- endocranium (én dōkrā'nīōm) *n.* [Gk. *endon* within *kranion* skull.] Process on inner surface of cranium of certain insects neurocranium, *q.v.*
- endocri (én dōkrīn) *n.* [Gk. *endon* within *krisis* to separate] A ductless gland. *a. Appl* or *fert* organs of internal secretion *Opp* exocrine
- endocrinology (én dōkrīnō'lōjī) *n.* [Gk. *endon* within *krisis* to separate *logos* discourse.] Study f. endocrine glands and secretions, and of hormonal substances and their effects.

**endocuticle** (en dōk'ūtl āl) *n* [Gk. *endon* within *L. cutis* of cut skin.] The elastic inner layer of insect cuticle inner layer of integument in spiders.

**endocycle** (en'dōs'īkl) *n* [Gk. *endon*, within *kyklos* circle.] A layer of tissue separating internal plasma from endodermis.

**endocycli** (en dōs'īkl) *n* [Gk. *endon* within *kyklos* circle.] With the mouth remaining in axis of coil of gut, *apfel* crucoid having an apical system with double circle of plates surrounding axis *apfel* echinoids *part* endocycle.

**endocyst** (en'dōs'īst) *n* [Gk. *endon* within *kystis* bladder.] The soft body wall in polyzoan *seed* the membranous inner lining of a protozoan cyst of epicyst.

**endoderm** (en dōd'ērm) *n* [Gk. *endon* within *derma*, skin.] The hypoblast the epithelium of digestive and respiratory organs and of glands appended to digestive tract.

**endoderm disc**,—posterior unpaired thickening on ventral surface of blastoderm of crayfish.

**endoderm lamella**,—a thin sheet of endoderm stretching between adjacent radial canals and between circular canal and exterior cavity in certain Coelenterate.

**endodermis** (en'dōd'ērm'īs) *n* [Gk. *endon* within *derma* skin.] Inner most layer of cortex in plants layer surrounding pericycle.

**endoenzyme** (en dōēn'zīm) *n* [Gk. *endon* within *en* in *zyme* leaven.] Any intracellular enzyme.

**endogamy** (endōg'āmī) *n* [Gk. *endon* within *gamos* marriage.] Zygote formation within the cyst by reciprocal fusion of division products of daughter nuclei self pollination inbreeding.

**endogastri** (en dōg'ās trīk) *n* [Gk. *endon* within *gaster* belly.] Having curvature of body with enclosing shell towards ventral side within the stomach.

**endogenous** (endōj'ēnās) *n* [Gk.

*endon* within *genes* producing.] Originating within the organism endogenic, *opp* exogenous auto-genic, *opp* allogenic developing from a deep-seated layer *apfel* metabolism concerned with tissue waste and growth.

**endogenous multiplication**,—spore formation *g.v*

**endogeny** (endōj'ēnī) *n* [Gk. *endon* within *genes* descent.] Development from a deep-seated layer.

**endognath** (en'dōgnāth') *n* [Gk. *endon* within *gnathos* jaw.] The inner branch of oral appendages of Crustacea.

**endognathion** (en'dōgnāth'ion) *n* [Gk. *endon* within *gnathos* jaw.] Mesial segment of human premaxilla.

**endogonium** (en dōgōn'īŭm) *n* [Gk. *endon* within *gonis* of *gonis* seed.] A gonidium formed in a gonodangium or receptacle the colony forming cells in such forms as Volvox.

**endolabium** (en dōlā'bēum) *n* [Gk. *endon* within *L. labrum* lip.] A membranous lobe in interior of mouth on middle parts of front of labrum.

**endolaryngeal** (en'dōlār'īal) *n* [Gk. *endon* within *larynx* larynx.] Part or in the larynx.

**endolithic** (en dōlīth'īk) *n* [Gk. *endon* within *lithos* stone.] Burrowing or existing in stony substratum, as algal filaments.

**endolymph** (en dōlīm'f) *n* [Gk. *endon* within *L. lymphē* water.] The fluid in membranous labyrinth of ear.

**endolymphangial** (en dōlīm'fāŋ'gīal) *n* [Gk. *endon* within *L. lymphē* water *Gk. angios* vessel.] Situated in a lymphatic vessel.

**endolymphatic** (en dōlīm'fāt'īk) *n* [Gk. *endon* within *L. lymphē* water.] Part lymphatics or to ear labyrinth ducts.

**endolysin** (endōl'īsīn) *n* [Gk. *endon* within *lysis* loosing.] Intracellular substance of leucocytes which destroys engulfed bacteria.



- endome** • (én dómē) [Gk. *endon* within *meros* part.] A hypoblast cell which gives rise to endoderm.
- e d metrium** (én dómē trīſm) *n* [Gk. *endon* within *metra* womb.] Mucous membrane lining the uterus.
- endomitosi** (én dómītō sis) *n*. [Gk. *endon*, within *mitos* thread.] A form of mitosis occurring in endopolyploidy; multiplication of chromocemata *r* chromosomes without division of nucleus.
- endomixis** (én dómēks is) *n* [Gk. *endon* within *mixis* mixing.] A stage comparable with parthenogenesis in the reproductive rhythm of some protozoa a type of nuclear reorganisation.
- endomyalium** (én dómē'ſiſm) *n*. [Gk. *endon* within *mys* muscle.] The connective tissue binding muscle fibres.
- endoneurium** (én dómē'ſiſm) *n*. [Gk. *endon*, within *neuron* nerve.] The delicate connective tissue holding together and supporting nerve fibres within funiculus.
- e doparasite** (én dōpār'āsī) *n* [Gk. *endon* within *parasitos* eating at another's table.] Any organism living parasitically within another.
- endoperidium** (én dōpēd'īd'ſm) *n* [Gk. *endon* within *peridion* little pouch.] Inner layer of peridium.
- endophragm** (én dōfrām) *n*. [Gk. *endon* within *phragma*, fence.] A septum formed by cephalic and thoracic apodemes in Crustacea.
- nd phragmal** (én dōfrāg'māl) *a*. [Gk. *endon* within *phragma* fence.] *Part.* the endophragm.
- ndophyllon** (én dōfil'ſſſ) *a*. [Gk. *endon* within *phyllon* leaf.] Sheathed by a leaf living within leaf *appl* parasites.
- end phyte** (én dōfī) *n*. [Gk. *endon* within *phyton* plant.] A plant growing within another either as parasite or otherwise.
- e d phytic** (én dōfī'tīk) *a*. [Gk. *endon* within *phyton* plant.] Living in the tissues of plants.
- e doplasm** (én dōplāsm) *n*. [Gk. *endon* withi *plasma*, mould.] The endosarc or inner portion of protoplasm in a cell.
- ndoplastals** (én dōplās'tāl) *n* [Gk. *endon* within *plastis* moulded.] The macrocubus of certain Protista.
- endopleura** (én dōploō rā) *n* [Gk. *endon* within *pleura* side.] The inner seed-coat of tegmen.
- endopleurite** (én dōploō rī) *n*. [Gk. *endon*, within *pleura* side.] The epimeral portion of an apodeme infolded *g* between pleurites.
- endopodit** (én dōpōdīt) *n* [Gk. *endon* within *podis* foot.] The inner or mesial branch of a biramous crustacean limb or the only part of biramous limb remaining.
- endopolyploidy** (én dōpōl'pīōdī) *n*. [Gk. *endon*, withi *poly* many *aploos* nefold *eidos* form.] Polyploidy resulting from repeated doubling of chromosome number without normal mitosis.
- endoral** (éndō rāl) *a*. [Gk. *endon* within *L.* mouth.] *Part.* structures situated in the vestibule of certain protozoa.
- endorhachis** (én dōr'ākīs) *n*. [Gk. *endon* within *rhachis* backbone.] A layer of connective tissue lining canal of vertebral column and cavity of skull.
- ndosarc** (én dōsār) *n* [Gk. *endon* within *sars* flesh.] Endoplasm, *q.s*
- endoscopi** (én dōskōp'īk) *a*. [Gk. *endon* within *skopis* to look.] With apex directed towards toward base of archepodium, *appl* embryo. *Opp* exoscopic.
- endosiphunc** (én dōsī'fūſſſ) *n* [Gk. *endon* withi *L.* *siphunculus* little tube.] The tube leading from protoconch to siphuncle in certain Cephalopoda.
- endoskeleton** (én dōskēl'ētōn) *n* [Gk. *endon* within *skelētos* dried *p*] Internal skeleton *Ap* exoskeleton.
- endosmosi** (én dōsmō sis) *n*. [Gk. *endon* within *osmos* impulse.] The passage inwards through permeable or semipermeable membrane of a less concentrated solution *Opp* osmosis.

- endosome** (én dōsōm) *n.* [Gk. *endon* within *soma* body] Chromatinic mass near centre of vesicular nucleus karyosome.
- endosperm** (én dōsēr'm) *n.* [Gk. *endon* within *sperma* seed] The nutritive tissue of certain seeds nutritive residue of female prothallus surrounding an embryo.
- endospore** (én dōsōr) *endo-*  
**porium** (én dōsōr'īum) *n.* [Gk. *endon* within *sperma* seed.] Inner coat of sporocyst in some protozoa an asexual spore a sporangial spore the inner coat of a spore wall.
- endosteal** (éndōstē'āl) *a.* [Gk. *endon*, within *stēon* bone.] *Part* endosteum.
- endosternite** (én dōstēr'nit) *n.* [Gk. *endon* within *L. sternum* sternum.] Internal skeletal plate for muscle attachment median sternal apodeme a free skeleton situated in pronotum between alimentary canal and nerve cord in arachnids.
- endosteum** (éndōstē'ūm) *n.* [Gk. *endon* within *stēon* bone] The internal periosteum lining the cavities of bones.
- endostoi** (én dōstō'sis) *n.* [Gk. *endon* within *stēon* bone.] Ossification which begins in cartilage.
- endotracheum** (éndōstrāk'ūm) *n.* [Gk. *endon* within *atrachea* shell.] The inner layer of mollusc shell.
- endostyl** (éndōstīl) *n.* [Gk. *endon* within *stylis* pillar] A band of thickened epithelium on oesophageal wall of a tornaria two ventral longitudinal folds separated by grooves in pharynx of Tunicata a longitudinal groove lined by ciliated epithelium on ventral wall of pharynx of Amphioxus precursor of thyroid gland.
- endotergite** (én dōtēr'jē -gē) *n.* [Gk. *endon* within, *L. tergum* back] An infolding of one tergite of insects, for muscle attachment phragma.
- endotheca** (én dōthē'kā) *n.* [Gk. *endon* within *thēke* box.] The system of dissepiments in a coral calyx the oval surface of Cystidea.
- endothelial** (én dōthē'āl) *a.* [Gk. *endon* within *thēke* box.] *Part* endothecium with asci 1 an sacocarp.
- endothecium** (én dōthē'siūm) *n.* [Gk. *endon* within *thēke* box.] The central region of an epibasal octant of oospore of liverworts and mosses inner lining of an anther inner delimiting layer in ginkgo and angiosperms.
- endotheliocyte** (én dōthē'siōkē) *n.* [Gk. *endon* within *thēke* nipple *lyte* hollow] A mononuclear phagocyte derived from endothelium endothelial phagocyte or primitive wandering cell a histiocyte a macrophage.
- endothelium** (én dōthē'tīūm) *n.* [Gk. *endon* within *thēke* nipple.] A squamous epithelium which lines serous cavities the heart, blood and lymphatic vessels.
- endothorax** (én dōthō'rāks) *n.* [Gk. *endon* within *thorax* chest.] The podeme system in crustacean thorax cf. entothorax.
- endotoxin** (én dōtōk'sin) *n.* [Gk. *endon* within *toxikon* poison.] A toxin within bacterial protoplasm *opp* exotoxin
- endotrachea** (én dōtrākē'a) *n.* [Gk. *endon* within *L. trachea* windpipe.] The innermost, chitinous coat of tracheal tubes of insects.
- endotrophic** (én dōtrōf'ik) *a.* [Gk. *endon* within *trophē* nourishment] *Opp* space within peritrophic membrane of insects finding nourishment from within *opp* fungi inhabiting root cortex of host. *Opp* ectotrophic.
- endozoochore** (én dōzō'ōkē) *n.* [Gk. *endon* within *zōon* animal *horē* place] Any spore, seed, or organism dispersed by being carried within an animal *Opp* epizoochore
- endoplatea**,—motor end-organs, the ramified expansions within the muscular fibre which form the ends of a motor nerve.
- end-asc**,—the sac-like vestigial portion of coelom in excretory glands of certain Crustacea.

- endysis** (én dī'sis) *n* [Gk. *endysis* putting on.] The development of a new coat of ecdysis.
- energosis** (én éj'is sīs) *n* [Gk. *energos* to be active.] The process by which energy is liberated through katabolic action.
- energoid** (én éj'oid) *n*. [Gk. *energos* working *idion* dim.] Any living uninucleated protoplasmic unit with or without a cell wall.
- enervose** (én'ér'vōs) *a*. [L. *ex* with out *nervus* sinew] Having no veins, *appl* certain alveae.
- en gram** (én grām) *n*. [Gk. *en* in *graphein* to write.] A character impression in the mnemonic theory of heredity a latent memory image.
- engraved** (éngrā d) *a*. (F on in A.S. *grafian* to dig) With irregular linear grooves on the surface.
- ensiform** (én al'fōrm) *a*. [L. *ensis* sword *forma* shape] Sword-shaped xiphoid
- entad** (én tād) *adv* [Gk. *entos* within L *ad* towards] Towards the interior inwards internally *Opp* ectad.
- ental** (én'tal) *a*. [Gk. *entos* within.] Inner internal. *Opp* ectal.
- ental chy** (éntel'ik) *n*. [Gk. *en* in *teia* end *ekhein* to hold.] Vital principle or influence guiding living organisms in right direction.
- epicondylar** (ént épikō dīlār) *a* [Gk. *entos* within *epi* upon *condylus* knob] *Pert* lower articular end of humerus *appl* ulnar foramen.
- enteral** (én'tér'al) *a*. [Gk. *enteron* gut.] Within intestine also *appl* the parasympathetic portion of the autonomic nervous system
- enteric** (éntér'ik) *a*. [Gk. *enteron* gut.] *Pert* alimentary canal.
- enteroblast** (éntérōblāst) *n* [Gk. *enteron* gut *blastos* bud.] The hypoblast after formation of the mesoblast.
- enterocoel** (éntérōkōēl) *n* [Gk. *enteron* gut *kōelos* hollow] A coelom arising as a pouch-like outgrowth of archenteric cavity or as series of such outgrowths.
- enterocrinin** (ént étrōkrī'nin) *n* [Gk. *enteron* gut *krinon* to separate.] A hormone of small intestine which stimulates secretion of intestinal juice.
- enteroderm** (ént'éródērm) *n*. [Gk. *enteron* gut *derma* skin.] Enteroblast.
- enterogastrone** (ént étrōgās'trōn) *n*. [Gk. *enteron* gut *gaster* stomach.] A duodenal hormone which inhibits secretion and motility of stomach.
- enterokinase** (ént'étrōkīnās) *n* [Gk. *enteron* gut *kinon* to move.] Incomplete enzyme of intestinal juice which converts trypsinogen into trypsin.
- enteron** (ént'étrōn) *n* [Gk. *enteron*, gut.] The alimentary tract.
- enteronephric** (ént'étrōnéf'rik) *a*. [Gk. *enteron* gut *nephros* kidney] With nephridia opening into gut *Opp* exonephric, *appl* Oligochaeta.
- enteropneust** (ént'étrōpnēst) *n*. [Gk. *enteron* gut *pnēstos* anus.] The opening from endodermal gut into proctodaeum.
- enterostome** (ént'étrōstōm) *n* [Gk. *enteron* gut *stoma* mouth.] The aboral opening of the actinopharynx, leading to coelenteron; the posterior opening of stomodaeum into endodermal gut.
- enterosympathetic** (ént'étrōsīmpāth-ét'ik) *a*. [Gk. *enteron* gut *syn* with *pathos* feeling] *Appl* that part of the nervous system supplying the intestine
- enterozoön** (ént'étrōzōō) *n* [Gk. *enteron* gut *zoön* animal.] Any animal parasite inhabiting intestines.
- entire** (éntir) *a* [M.E. *entir* untouched.] Unpaired with continuous margin. *Appl* leaves, bacterial colony
- ento**,—are also *endo*
- entobronchial** (ént'ōbrōng'kīāl) *a* [Gk. *entos* within *brōngchos* gills] Having internal gills.
- entobronchus** (ént'ōbrōng'kūs) *n* [Gk. *entos* within *brōngchos* windpipe.] The dorsal secondary branch of bronchus in birds entobronchium.

- entochondrite** (en'tōkōn drī) *n*. [Gk. *entes* within *chondros* cartilage.] Plastron or endosternum of Limulus.
- entochondrosteals** (en'tōkōndrōstō'sh) *n*. [Gk. *entes* within *chondr* cartilage *osteon* bone.] Ossification from within outwards.
- entocodon** (en'tōkōdōn) *n*. [Gk. *entes* within *codon* bell.] The lens-shaped mass of cells, in development of medusoid, which sinks below level of superficial ectoderm, and ultimately develops a cavity.
- entocoel** (en'tōkōēl) *n*. [Gk. *entes* within; *coel* hollow.] The space enclosed by a pair of mesenteries in Anthozoa.
- entocordyl** (en'tōkōrdīl) *n*. [Gk. *entes* within *cordyl* knob.] Cordyle on mesial surface of bone.
- entoconeid** (en'tōkōnēid) *n*. [Gk. *entes* within *conus* cone.] The postero-external cusp of a lower molar.
- entocuneiform** (en'tōkōnē'fōrm) *n*. [Gk. *entes* within *cuneus* wedge *L. formis* shape.] The most internal of distal tarsal bones.
- entocyemata** (en'tōkōē māt) *n*. [Gk. *entes* within *cyema*, embryo.] With embryos having amnion and allantois.
- entoderm(al)**—endoderm(al) *q.v.*
- entogastric** (en'tōgā'strik) [Gk. *entes* within *gaster* belly.] Part interior of stomach *apud* gastric budding in medusae.
- entoglossal** (en'tōglō'sāl) *n*. [Gk. *entes* within *glossa* tongue.] Lying in substance of tongue.
- entoglossum** (en'tōglō'sūm) *n*. [Gk. *entes* within *glossa* tongue.] Extension of buccal into tongue in some fishes also glossohyal.
- tomogenous** (en'tōgōē'ēnēs) [Gk. *ekthomēn* insect *genesis* birth.] Growing on insects as certain fungi.
- Entomology** (en'tōmōl'ōjī) *n*. [Gk. *entomōn* insect *logos* discourse.] That part of zoology which deals with insects.
- entomophagous** (en'tōmōf'āgēs) *n*.

- [Gk. *entomōn* insect *phagōn* to eat.] Insect-eating insectivorous or molluscous (en'tōmōf'ōs) *n*. [Gk. *entomōn* insect *phagōn* (love) Pollinated by agency of insects.
- entoneural** (en'tōnē'ral) *n*. [Gk. *entes* within *neuron* nerve.] *Apud* system of aboral ring and genital nerves in echinoderms.
- entophyte**—endophyte *q.v.*
- entoplic** (en'tōp'lik) *n*. [Gk. *en* in *eplos* place.] In normal position, *apud* ectopic.
- entoplasm**—endoplasm *q.v.*
- entoplastron** (en'tōplā'strōn) *n*. [Gk. *entes* within *F. plastron* breast plate.] The anterior median plate in chelonian plastra often called episternum, probably homologous with interclavicle of other reptiles.
- entopterygoid** (en'tōptēr'igōid) *n*. [Gk. *entes* within *pteryx* wing; *eidos* form.] A dorsal membrane bone behind the palatine in some fishes of ectopterygoid.
- entosphere** (en'tōspher) *n*. [Gk. *entes* within *sphaera* globe.] The inner portion of attraction sphere.
- entosternite**—endosternite *q.v.*
- entosternum** (en'tōstēr'nūm) *n*. [Gk. *entes* within *L. sternum* breast bone.] Entoplastron, *q.v.* an internal process of sternum of numerous arthropods.
- entothorax** (en'tōthō'rāks) *n*. [Gk. *entes* within *thorax* chest.] An insect prothorax or sternite.
- entoturbinals** (en'tōtūr'blāks) *n. pl.* [Gk. *entes* within *L. turbe* whirl.] A division of ethmoturbinals.
- entotympanic** (en'tōtīmpan'ik) *n*. [Gk. *entes* within *tympanon* drum.] A separate tympanic element in some genera; also metatympanic.
- entovarial** (en'tōvā'riāl) *n*. [Gk. *entes* within *L. ovaria* egg.] Part canal formed in ovaries of some fishes by insinuating and closure of groove formed by covering epithelium.
- entozoon** (en'tōzōō) *n. pl.* [Gk. *entes* within *zōon* animal.] Internal animal parasites.

- entozoic** (én'tòzò'ík) *n.* [Gk. *entos* within; *see* subsistence.] Living within the body or substance of another animal or plant *part* entozoa.
- entrochite** (én trók'it) *n.* [Gk. *en*, in *trochos* wheel.] The joint of fossil stem of a stalked crinoid.
- enucleate** (énú'kléât) *v.* [L. *e* out of *nucleus* kernel.] To deprive of nucleus, as in microdissection of cells. *a.* Lacking a nucleus.
- envelope** (én èlöp) *n.* [F *enveloppe* covering] An outer covering of an egg any surrounding structure *f* floral envelope.
- environment** (évi'rònmént) *n.* [F *environ*, about.] The sum-total of external influences acting on an organism or on part of an organism.
- enzootic** (én zòót'ík) *a.* [Gk. *en* in *zoon* animal.] Afflicting animals *appl* disease restricted to a locality.
- enzyme** (én zim) *n.* [Gk. *en* in, *zyme* leaven.] A catalyst produced by living organisms and acting on one or more specific substrates as a ferment *f* apo-enzyme co-enzyme.
- Eocene** (é'sén) *n.* [Gk. *eos* dawn *haios* recent.] Early epoch of the Tertiary period, between Palaeocene and Oligocene.
- Eoga** (é'gá) *n.* [Gk. *eos* dawn *gáia* land.] A zoogeographical division including Africa, South America, and Australasia *f* Caenogaea.
- eosinophil** (é'sein ófil) *a.* [Gk. *eos* dawn *philos* to love] *Appl* cells which readily stain red with eosin oxyphil.
- Eozoic** (é'zóó'ík) *a.* [Gk. *eos* dawn *see* life.] *Appl* Archæan or Pre-Cambrian period.
- epacme** (épák'mé) *n.* [Gk. *epi* upon *aimos* prime.] The stage in phylogeny of a group just previous to its highest point of development.
- epalpat** (épálpát) [L. *ex* without *pálpus* palp.] Not furnished with palp.
- epanthou** (épán'thós) *a.* [Gk. *epi* upon *anthos* flower] Living on flowers *appl* certain fungi.
- epapillate** (épáp'lát) *a.* [L. *ex* without *papilla*, nipple.] Not having papillae.
- epapophysis** (ép'ápóf'is) *n.* [Gk. *epi* upon; *apophysis* offshoot.] A median process arising from centre of vertebral neural arch.
- eparterial** (ép'árté'riál) *a.* [Gk. *epi* upon L. *arteria*, artery] Situated above an artery *appl* branch of right bronchus.
- epaul ties** (ép óléts) *n. plur.* [F *épaule* shoulder] Branched or knobbed processes projecting from outer side of oral arms of many Scyphozoa crescentic ridges of cilia in echinopluteus.
- epaxial** (épák'siál) *a.* [Gk. *epi* upon L. *axis* axle.] Above the axis, dorsal usually *appl* axis formed by vertebral column.
- eped phic** (ép'édáf'ík) *a.* [Gk. *epi* upon *adaphos* soil.] *Part.*, or depending upon, climatic conditions.
- epé cephalon** (ép énéf'álon -séf) *n.* [Gk. *epi* upon *enkephalos* brain.] The cerebellum.
- ep dyma** (épén díml) *n.* [G. *ependyma*, outer garment.] The layer of cells lining cavities of brain and spinal cord *ependyme*.
- ependymal** (épén díml) *a.* [Gk. *ependyma* outer garment.] *Part.* *ependyma*.
- ephapse** (éflaps) *n.* [Gk. *epheptis* to reach.] Region of contiguity between two axons lying side by side.
- ephaptic** (éfláp'ík) *a.* [Gk. *epheptis* to reach.] *Part* an ephapse; *appl* delay the interval between stimulation of on (pre-ephaptic) axon and response of an pposed other (post-ephaptic) axon.
- pharmomel** (é'fármón'ík) *a.* [Gk. *epi* towards *harmos* fitting] *Part* epharmous adaptive adapted to environment *appl* convergence morphological resemblance of different species inhabiting the same environment.

pharmosol (ēf'ārmō'stā) *n.* [Gk. *epi* towards *harmos* fitting] The process of adaptation of organisms to new environmental conditions attainment of the state of adaptation or epharmosy.

epibiotic (ēf'ēbīk) *a.* [Gk. *epibios* adult.] Adult *perz.* stage in development or phylogeny between childhood and old-age stages.

epimeral (ēēm'ērāl) *n.* [Gk. *epimeras* lasting for a day] A short lived plant or animal species. *a.* Short-lived taking place once only *appl.* plant movements, as expanding of buds completing life cycle within brief time period.

phippial (ēfp'īāl) *a.* [Gk. *ephippium*, saddle-cloth.] *Perz.* ephippium *appl.* winter eggs, as of rotifers and daphnia.

phippium (ēfp'īēm) *n.* [Gk. *ephippium* saddle-cloth.] The pituitary fossa, or fossa hypophyseus of sphenoid thickened and indurated part of shell separating from the rest at ecdysis a saddle-shaped modification of cuticle derived, later detached from carapace and enclosing winter eggs in Daphniidae.

phyra (ēf'īrā), phyrula (ēf'īrūlā) *n.* [Gk. *Ephyra*, nymph name.] The small free-swimming jelly-fish stage of certain Scyphozoa, produced by strobilation of scyphistoma.

epibasal (ēp'ībāsāl) [Gk. *epi* upon *basu* base.] Upper segment of an oospore, ultimately giving rise to the shoot. *Opp.* hypobasal.

epibenthos (ēp'ībēnthōs) *n.* [Gk. *epi* upon *benthos* bottom.] Fauna and flora found between low-water mark and hundred fathom line.

epibiotic (ēp'ībīōt'ik) *a.* [Gk. *epi* toward to survive.] Surviving *appl.* endemic species that are relics of former flora or fauna.

epiblast (ēp'ībīlās) *n.* [Gk. *epi* upon *blastos* bud.] The outer layer of the gastrula ectoblast a rudimentary second cotyledon, as in grasses.

epiblast (ēp'ībīl'ēmā) *n.* [Gk. *epi* above, cover] The outermost layer of root-stem piliferous layer epiblast.

epibole (ēp'ībōlē) *n.* [Gk. *epibole* putting on.] Growth of one part over another in embryonic stages also epiboly.

epibolic (ēp'ībōl'ik) *a.* [Gk. *epibole* putting on.] Growing so as to cover over *appl.* type of gastrulation.

piibranchial (ēp'ībrāng'kiāl) *a.* [Gk. *epi* upon *branchia* gills.] *Perz.* second upper element in branchial arch efferent branchial, *appl.* venous.

epicalyx (ēp'īkāl'iks) *n.* [Gk. *epi*, upon *calyx*, cup.] Stipules, fused in pairs, producing an apparent outer or extra calyx structure just below calyx produced by aggregation of bracts or bract toots.

picanthus (ēp'īkānthōs) *n.* [Gk. *epi* upon *kanthos* corner of eye.] A prolongation of upper eyelid over inner angle of eye Mongolian fold.

picardium (ēp'īkār'diūm) *n.* [Gk. *epi* upon *karde*, heart.] The visceral part of pericardium tubular prolongation of branchial sac in many ascidians, which takes part in budding.

picarp (ēp'īkār)p) *n.* [Gk. *epi* upon *karpos* fruit.] Outer layer of the pericarp exocarp.

epicentral (ēp'ībēn'trāl) *a.* [Gk. *epi*, upon *kentron*, centre.] Attached to or arising from vertebral centra *appl.* intermuscular bones.

epicerebral (ēp'ībēr'ēbrāl) *a.* [Gk. *epi*, upon *L. cerebrum* brain.] Situated above the brain.

plethidium (ēp'īkl'īdēm) *n.* [Gk. *epi* upon *helle* sp.] Terminal lobe of lower petal of orchid epichile.

- epichordal** (ép'íkôr'dál) *a.* [Gk. *epi* upon *chord* cord.] Upon the notochord *apfl* vertebrae; which ventral cartilaginous portions are almost completely suppressed; *apfl* upper lobe of caudal fin in fishes.
- epicoel** (ép'ikél) *n.* [Gk. *epi* upon *kólos* hollow] Cavity of mid-brain in lower vertebrates cerebellar cavity a perivisceral cavity formed by invagination also epicoele epicoelia.
- epicondylar** (ép'ikôn dílar) *a.* [Gk. *epi* upon *hondylos* knob.] *Part* epicondyle.
- epicondyle** (ép'ikôn díl) *n.* [Gk. *epi* upon *hondylos* knob.] A medial and a lateral protuberance at distal end of humerus and femur.
- epiconus** (ép'ikôn) *n.* [Gk. *epi* upon *konos* cone.] The part anterior to girdle in Dinoflagellata, *apfl* hypcone.
- epicoracoid** (ép'ikôr'ákoíd) *a.* [Gk. *epi* upon *koros* crow *eidos* form.] *Part* an element, usually cartilaginous, at sternal end of coracoid in amphibians reptiles, and monotremes.
- epicormic** (ép'ikôr'mík) *a.* [Gk. *epi* upon *kormos* trunk.] Growing from dormant bud.
- epicotyl** (ép'ikót'il) *n.* [Gk. *epi* upon *kotyle* vase.] The axis of a plumule.
- epicotyl d nary** (ép'ikót'ilé dónári) *a.* [Gk. *epi* upon *kotyle* cup] Above the cotyledons.
- epicoxite** (ép'ikók'sít) *n.* [Gk. *epi* upon *L. coxa*, hip] A small process at posterior end of toothed part of coxa of second to fifth pairs of ppendages in Eurypterida.
- epicranial** (ép'ikrá níál) *a.* [Gk. *epi* upon *kranion* skull.] *Part* cranium *apfl* aponeurosis, muscles, bones, suture.
- epicranial m** (ép'ikrá níúm) *n.* [Gk. *epi* pon *kranion* skull.] Th region between and behind eyes insect head scalp the structures covering the cranium.
- epicranialu** (ép'ikrá níús) *n.* [Gk. *epi* upon *kranion* skull.] The scalp

muscle, consisting of occipitals and frontals, connected by gales aponeurotica occipitofrontalis.

**epicrine** (ép'ikrín) *a.* [Gk. *epi* upon *krisis* to separate.] *Apfl* glands in which secretion is voided without disintegration of cells.

**epicritic** (ép'ikrit'ík) *a.* [Gk. *epi* upon *krisis* i judge.] *Apfl* stimuli and nerve systems concerned with delicate touch and other special sensations in skin.

**epiteals** (ép'it's ép'it's kít-) *n.* [Gk. *epiteals* further gain.] Capacity f a living cell to concentrate salt solutions diffusing into th cell.

**epicuticle** (ép'ikrú'ík ilá) *n.* [Gk. *epi* upon *L. derm* of cutis skin.] Lamella or membrane external to exocuticle of insects.

**epicyst** (ép'isist) *n.* [Gk. *epi* upon; *kystis* bladder] The external resistant cyst f an encysted protozoan of endocyst.

**epicyte** (ép'isít) *n.* [Gk. *epi* pon *kystis* hollow] The external layer of ectoplasm in certain protozoa.

**epidemes** (ép'idéma) *n. plu.* [Gk. *epi* pon *dermas* body] I certal insects, small pieces closely related with articulation of wings.

**epidermis** (ép'idér ml) *n.* [Gk. *epi* upon *derma*, skin.] The outer most protective layer of stems, roots and leaves scarf-skin or external layer of skin, non-vascular stratified epithelium of ectodermic origin single layer of ectoderm in invert brates.

**epididymis** (ép'idid'imis) *n.* [Gk. *epi* pon *dadyms* testicle.] A mass at back of testicle composed chiefly of vasa efferentia the coiled anterior end of Wolffian duct.

**pidural** (ép'idó ral) *a.* [Gk. *epi* upon *L. derm* hard] *Part* dura mater *apfl* space between dura mater and wall of vertebral canal.

**epigamic** (ép'igám'ík) *a.* [Gk. *epi* upon *gamos* marriage.] Tending to attract opposite sex f colour displayed in courtship

**epigonon** (epi'gonon) *n.* [Gk. *epi* upon *gonos* marriage.] Designating that stage in polychaetes in which immature forms become heteronereid, while sexual elements are ripening *epigonos, pl.*

**epigaster** (epi'gaster) *n.* [Gk. *epi* upon *gaster* belly.] That part of embryonic intestine which later develops into colon.

**epigastri** (epi'gasteri) *n.* [Gk. *epi* upon *gaster* belly.] *Part.* anterior wall of abdomen middle region of upper some of artificial divisions of abdomen.

**epigastrium** (epi'gasterion) *n.* [Gk. *epi* upon *gaster* stomach.] The epigastric region sternal portions of meso- and metathorax of insects.

**epigastroid**,—**epipobis**, *pl.*  
**epigeal** (epi'geal) *n.* [Gk. *epi* upon *ge* earth.] Living near the ground *ephl.* insects borne above ground, *ephl.* cotyledons when they form first foliaceous leaves also epigeal, epigeic, epigeous.

**epigenesis** (epi'genes) *n.* [Gk. *epi* upon *genesis* descent.] Theory of generation, that embryo is an entirely new creation, not mere unfolding of preformed structures.

**epigenetics** (epi'genetis) *n.* [Gk. *epi* upon *genesis* descent.] Study of the mechanisms causing phenotypic effects to be produced by the genes of genotype.

**epigenotyp** (epi'genotip) *n.* [Gk. *epi* upon *gonos* descent *typos* image.] The concatenation of processes linking genotype and phenotype.

**epigenous** (epi'genes) *n.* [Gk. *epi* upon *gonos* descent.] Developing or growing on surface.

**epiglott** (epi'glottis) *n.* [Gk. *epi* upon *glotta*, tongue.] A thin lamella of fibro-cartilage between root of tongue and entrance to larynx *epiglottis* in *Polyura* *epipharynx* in *Insecta*.

**epignathous** (epi'gnathos) *n.* [Gk. *epi* upon *gnathos* jaw.] Having upper jaw longer than lower *pigon*—*epigonum*.

**epigonial** (epi'gonial) *n.* [Gk. *epi* upon *gonos* seed.] *Appl.* steric posterior portion of genital ridge.

**epigonium** (epi'gonium) *n.* [Gk. *epi* upon *gonos* seed.] The young sporangial sac in liverworts.

**epigynal** (epi'gynal) *n.* [Gk. *epi* upon *gyn* woman.] *Part.* epigynum.

**epigynous** (epi'gynos) *n.* [Gk. *epi* upon *gyn* woman.] Having the various whorls adnate to ovary thus apparently inserted in ovary.

**epigynum** (epi'gynum) *n.* [Gk. *epi* upon *gyn* woman.] External female genitalia in *Arachnida*; also epigynous epigynium.

**epigynus** (epi'gynus) *n.* [Gk. *epi* upon *gyn* woman.] Condition of having whorls apparently inserted in ovary.

**epiphyal** (epi'phyal) *n.* [Gk. *epi* upon *physis* T-shaped.] *Part.* upper portion of ventral part of hyoid arch. *n.* Upper element of ventral portion, cartilage or bone in centre of stylohyoid ligament.

**epilabrum** (epi'labrum) *n.* [Gk. *epi* upon *L. labrum* lip.] A process at side of labrum in *Myriapoda*.

**epilemmal** (epi'lema) *n.* [Gk. *epi* upon *lemma* skin.] *Appl.* sensory nerve endings on surface of sarcolemma.

**epilimnion** (epi'limnion, -limnion) *n.* [Gk. *epi* upon *limnos* stagnant water *limnos* marshy lake.] Upper water layer above thermocline, in lakes. *Opp.* hypolimnion.

**epilithal** (epi'litik) *n.* [Gk. *epi* upon *lithos* stone.] Attached on rocks *ephl.* algae.

**epimandibular** (epi'mandibular) *n.* [Gk. *epi* upon *L. mandibula* jaw.] *Part.* bone in lower jaw of vertebrates.

**epimeral** (epi'meris) *n.* [Gk. *epi* upon *meros* thigh.] *Part.* epimeron.

**epimere** (epi'meris) *n.* [Gk. *epi* upon *meros* part.] The dorsal muscle-plate of mesothelial wall.

**epimeris** (epi'meris) *n.* [Gk. *epi* upon *meros* part.] Deciduous portion of protomerite in certain *Copepodina*.



- epimeron (epimēron) *n* [Gk *epi* upon *meros* thigh.] A portion of pleuron in insects which may be posterior or nearly as far forward as episternum posterior pleurite of subcoxa portion of arthropod segment between tergum and limb insertions.
- epimorpha (epimōrfa) *n. plu.* [Gk. *epi* upon *morphe* form.] Larva hatched with all appendages developed of anamorpha.
- epimorphosis (epimōrfosis) *n* [Gk. *epi* pon *morphosis* shaping.] That type of regeneration in which proliferation of new material precedes development of new part.
- epimysium (epimixtium) *n* [Gk. *epi* pon *mys* muscle.] The sheath of areolar tissue which invests the entire muscle of periviscerum.
- epinasty (epinastē) *n*. [Gk. *epi* upon *nastos* close-pressed.] The more rapid growth of upper surface of dorso-ventral organ e.g. leaf thus causing unrolling or downward curvature.
- epinephrine (epinefrēn) *n* [Gk. *epi* upon *nephros* kidney] Adrenaline adrenin.
- epinephros (epinefrōs) *n* [Gk. *epi* upon *nephros* kidney] The suprarenal or adrenal body.
- epineural (epineūral) *a*. [Gk. *epi* upon *neuron* nerve] Arising from vertebral neural arch part canal external to radial nerve in certain echinoderms *appl.* sinus between embryo and yolk, beginning of body cavity in insects.
- epineurium (epineūrium) *n* [Gk. *epi* upon *neuron* nerve] The external sheath of nerve cord.
- epinotum (epinōtūm) *n* [Gk. *epi* upon *noton* back] Propodeon *q.v.*
- epipticon (epiptikōn) *n*. [Gk. *epi* upon *epi* sight.] The middle zone of optic lobes of insects.
- epitoti (epitōtik) *a*. [Gk. *epi* upon *otōs* the ear] *Part* upper element of bony capsule of ear *appl.* centre of ossification of mastoid process.
- piparasite (epipārāsē) *n* [Gk. *epi* pon *parasitos* eating at another's table.] Ectoparasit *q.v.*
- epipelagic (epipēlajik) *a* [Gk. *epi* upon *pelagos* sea.] *Part* deep-sea water between surface and bathypelagic zone.
- epiperidium, —exoperidium, *q.v.*
- pipetalous (epipētālōn) *a*. [Gk. *epi* pon *petalos* petal.] Having stamens inserted on petals.
- epipharyngeal (epipharīngēal) *a*. [Gk. *epi* pon *pharynx* throat.] *Part* upper or dorsal aspect of pharynx.
- epipharynx (epipharīngis) *n* [Gk. *epi* upon *pharynx* throat.] A projection on roof of mouth cavity of certain insects membranous lining of labrum and clypeus drawn out with labrum to form a piercing organ, as in *Diptera* lingua.
- piploem (epiploēm) *n* [Gk. *epi* upon *phloos* bark.] Outer bark.
- piphragm (epiphram) *n*. [Gk. *epi-phragma*, cover g.] A layer of hardened mucous matter or a calcareous plate closing the opening of certain gastropod shells membrane which closes the capsule in certain mosses a closing membrane in sporophores of certain fungi.
- epiphyll (epiphyl) *n*. [Gk. *epi* upon *phyllon* leaf.] A plant which grows on leaves & various lichens.
- epiphyllous (epiphyllos) *a*. [Gk. *epi* pon *phyllon* leaf.] Growing on leaves united to perianth *appl.* stamens.
- epiphysial (epiphysial) *a* [Gk. *epi* upon *physis* to grow] *Part* or similar to the epiphysis epiphysial.
- piphyal (epiphals) *n*. [Gk. *epi* upon *physis* to grow] Any part or process of bone which is formed from a separate centre of ossification and later fuses with the bone pibasal body pibasal and parapibasal organs stout bony firmly fused to alveolus of each jaw and articulating with rotulae in sea urchins certain processes on tibia of insects caruncle near hilum of seed.

epiphyt (ép'íftu) *n*. [Gk. *epi* upon *phyton* plant.] Plant which lives on surface of other plants.

epiphytic (ép'íftik) [Gk. *epi* upon *phyton*, plant.] Living on or attached to surface of a plant, *opp* endophytic *part.* or similar to an epiphyte.

epiphytosis (ép'íftótík) *n*. [Gk. *epi* upon *phyton* plant.] *Part* disease epidemic in plants.

epiplankton (ép'ípláŋktón) *n*. [Gk. *epi*, upon *planktos* wandering.] That portion of plankton from surface to one hundred fathoms.

epiplasm (ép'íplázm) *n*. [Gk. *epi* upon; *plasma*, mould.] Cytoplasm of a brood mother-cell remaining unshed in brood formation. cytoplasm of sacus remaining after spore formation.

epiplastron (ép'íplástrón) *n*. [Gk. *epi* upon *F* *plastron* breast plate.] One of anterior pair of bony plates in plastron of Chelonia.

epipleura (ép'íploo'rú) *n*. [Gk. *epi*, upon *pleura*, rib.] Epithelial part of cingulum in diatoms; one of rib-like structures in teleosts which are not preformed in cartilage; an uncinate process in birds; the turned down outer margin of elytra of certain beetles.

epiploic (ép'íploík) *n*. [Gk. *epi* upon *ploon* caul of entrails.] *Part* omentum.

epiploic foramen,—opening between bursa omentalis and large sac of peritoneum foramen of Winslow

epiploon (ép'íplooŋ) *n*. [Gk. *epi* upon *ploon* caul of entrails.] Great omentum insect adipose tissue.

epipodial (ép'ípódial) *n*. [Gk. *epi*, upon *podia* foot.] *Part* epopodium.

epipodite (ép'ípódn) *n*. [Gk. *epi* upon *podis* foot.] A process arising from basal joint of crustacean limb and usually extending into gill chamber

epipod *n* (ép'ípódiúm) *n*. [Gk. *epi* upon *podis* foot.] The leaf-blade or lamina. embryonic leaf lamina ridge, fold, or lobe along edge of foot of Gastropoda raised

ridge on an ambulacral plate in Echinoides.

epipreacoroid (ép'íprékór'ákoíd) *n*. [Gk. *epi* upon *L. pre* before Gk. *humer* crow *oides* form.] A small cartilage at ventral end of precoracoid in pectoral girdle in some Chelonia.

epiproct (ép'íprókt) *n*. [Gk. *epi* upon *proctos* anus.] A supra-anal plate representing tergum of tenth or eleventh segment in some insects.

epipteri (ép'íptérík) *n*. [Gk. *epi* upon *pteron*, wing.] *Part* or shaped like, or placed above wing; *epipl.* small skull bone between parietal and sphenoidal abs.

epipterygoid (ép'íptér'igóid) *n*. [Gk. *epi* upon *pteryx* wing.] A small bone extending nearly vertically downwards from prootic to pterygoid also columella cranii.

epip bis (ép'íp'bík) *n*. [Gk. *epi* upon *L. pubes* adult.] *Part*, or borne upon pubis. *epipl.* certain cartilages or bones principally in maniripals. *epipl.* anterior median process of ischiopubic plate.

epip bis (ép'íp'bís) *n*. [Gk. *epi* upon *L. pubes* adult.] Unpaired cartilage or bone borne anteriorly on pubis; also epigastroid.

epirrhous (ép'írrí'sen) *n*. [Gk. *epi* upon *rhoe*, root.] Growing upon root.

pirrhysa (ép'írr'ús) *n. abs.* [Gk. *epirrhoe* to flow into.] Inhalant canals in sponges. *epipl.* porrhysa.

plasmatic (ép'ísmátík) *n*. [Gk. *epi* upon *asma* sign.] Aiding in recognition. *epipl.* coloration, markings.

plasma (ép'ísm) *n*. [Gk. *epi* upon; *asma*, sign.] A marking or colour aiding in recognition.

plasepalous (ép'ísep'alús) *n*. [Gk. *epi* upon *F* *sepale* sepal.] Adnate to sepal.

episkeletal (ép'ískéltál) *n*. [Gk. *epi* upon *skelatos* hard.] Outside the endoskeleton.

episperm (ép'íspérm) *n*. [Gk. *epi* upon *sperma*, seed.] The outer coat of seed spermoderm testa.

- epilporangium (ép'ispōrānjūm) *n* [Gk. *epi* upon *sporus* seed *anggen* vessel.] An indusium
- epispore (ép'ispōr) *n* [Gk. *epi* upon *sporos* seed.] The outer layer of a spore wall peridium *q.v.*
- epistasis (épistásis) *n* [Gk. *epi* pon *stasis* standing.] Dominance of a gen over another non-allelomorphic gene *epistasy q.v.*
- epistasy (épistási) *n*. [Gk. *epi* upon *stasis* standing.] Greater degree of modification manifested by one of two related types in phylogenesis masking of one hereditary character by another *epistasis, q.v.*
- epistatic (ép'istátik) *n*. [Gk. *epi* *statis* master] *Appl.* the predominating of two characters whose genes are not allelomorphs exhibiting or *part* the condition of epistasis of hypostatic.
- episternalia (ép'istērnā'liā) *n pl.* [Gk. *epi* upon *sternon* breast bone.] Two small elements preformed in cartilage frequently intervening in development between clavicles and sternum and ultimately fusing with sternum.
- episternite (ép'istēr'it) *n* [Gk. *epi* upon *sternon* breast bone.] One of portions of an ovipositor formed from sd portions of a somut
- episternum (ép'istēr'ūm) *n* [Gk. *epi* upon *L. sternum* breast bone.] The terclavici also applied to an anterior cartilaginous element of sternum a lateral division of an arthropod scutite above sternum and in front of epimeron anterior pleurite of subcoxa.
- epistome (ép'istōm) *n* [Gk. *epi* upon *stoma* mouth] A small lobe overhanging mouth in Polyzoa and containing part of body cavity the region between antenna and mouth in Crustacea subchelical plate in certain ticks that portion of insect head immediately behind labrum portion of rostrum of certain Diptera also epistoma.

- epistroph (ép'strōf) *n* [Gk. *epi* *strophē* moving bout.] The position assumed by chloroplasts along outer and inner cell-walls when exposed to diffuse light.
- epistropheus (ép'istrō'fēus) *n* [Gk. *epistrophē* turning.] The second cervical or axis vertebra.
- pithalamus (ép'thāl'āmūs) *n*. [Gk. *epi* upon *thalamus* chamber.] Part of thalamencephalon, comprising trigonum habenulae pical body and posterior commissure.
- epithallus (ép'thāl'ūs) *n*. [Gk. *epi* pon *thallos* branch.] Growing on the thallus.
- epitheca (ép'thē'kā) *n*. [Gk. *epi* upon *theca* cup.] An external layer surrounding lower part of theca in many corals theca covering epacone in Dinoflagellata older half of frustule in diatoms.
- epithecium (ép'thē'wūm) *n*. [Gk. *epi* pon *theca* cup.] The surface of spore-cases in lichens and of egl.
- epithelial (ép'thē'liāl) *n*. [Gk. *epi* pon *thale* nipple.] *Part* epithelium epitheliomorph
- epithelial bodies, — the parathyroids.
- epithelial fibrilla (ép'thē'liōfibrilē) *n pl.* [Gk. *epi* pon *thale* nipple *L. fibrilla*, small fibre.] Parallel or reticular fibrilla of columnar epithelium analogous to myofibrillae
- epitheliomorph (ép'thē'liōmōrf) *n*. [Gk. *epi* upon *thale* nipple *morphe* form.] Resembling epithelium epitheloid *Appl.* layer of cells, or elastica interna, which secretes notochordal sheath
- epithelium (ép'thē'liūm) *n* [Gk. *epi* upon *thale* nipple.] Any cellular tissue covering a free surface as lung tube or cavity
- pithem (ép'thēm) *n* [Gk. *epi* pon *tythēma* to put.] A plant tissue of specialised cells and intercellular spaces forming hydathode the secretory layer in nectaries an excrescence on the beak of birds also epithema and epitheme

- pitok na (əp'it'ókna) *n.* [Gk. *epi* upon *lakus* birth.] Designating the heterocercoid stage of certain polychaetes.
- pitr mati (əp'itrēmāt'ik) *n.* [Gk. *epi* upon *trama*, pore.] *Appl* pper lateral bar of branchial basket of lamprey.
- epitrichial (əp'itrík'ial) *n.* [Gk. *epi* upon *trix* hair] *Peri.* or resembling the epitrichium.
- epitrichium (əp'itrík'iúm) *n.* [Gk. *epi* upon *trix* hair] An outer layer of foetal epidermis of many mammals, usually shed before birth.
- epitrochlea (əp'itrók'leá) *n.* [Gk. *epi* upon *L. trochlea*, Gk. *trochilein*, pulley] Inner condyle at distal end of humerus.
- epitympani (əp'timpan'ik) *n.* [Gk. *epi* upon *L. tympanon*, kettle-drum.] Situated above tympanum.
- pivalve (əp'iváiv) *n.* [Gk. *epi* upon *L. valva*, fold.] The pical part of envelope in certain Dinoflagellata epicons.
- plyxions (əp'it'síon, əp'it'síon) *n.* [Gk. *epi* upon *sylon* wood] Growing upon wood.
- plaxi (əp'it'sí'ik) *n.* [Gk. *epi* upon *seen* animal] Living or attached to the body of an animal.
- plaxochor (əp'it'sí'ók) *n.* [Gk. *epi* upon *seen* animal *chora*, place.] Any spore, seed, or organism dispersed by being carried upon the body of an animal. *Opp* endozoochore.
- plaxon (əp'it'sí'ón) *n.* [Gk. *epi*, upon *seen*, animal] An animal living on another an external parasite ectozoon.
- epizootic (əp'it'sí'ók'ik) *n.* [Gk. *epi*, upon *seen*, animal.] Common among animals. Disease affecting large number of animals simultaneously corresponding to epidemic in man.
- epixygai (əp'it'sí'igáil) *n.* [Gk. *epi* upon *sygva* yoke.] The upper ossicle in xygyal pair of brachials or columnals in crinoids.
- ponychium (əp'ónik'ióm) *n.* [Gk. *epi* upon *onyx* nail.] The thin cuticular fold which overlaps lunula of nail dorsal portion of a neonychium.
- epoophoron (əp'óof'órón) *n.* [Gk. *epi* upon *see*, egg *phorion*, to bear] A rudimentary organ (homologous with epididymis) remains of Wolffian body of embryo, lying in mesosalpinx between ovary and uterine tube organ of Rosenmüller.
- qual (ə'kwál) *n.* [L. *aequalis* equal.] Having the portions of the lamina equally developed on the two sides of midrib *Appl.* leaves.
- equati *a* division,—homeotypic or second division in meiosis.
- quatorial furrow—division round equator of segmenting egg.
- equatorial plate,—group of chromosomes lying at equator of spindle during mitosis locus of new cell-wall after cell-division.
- quibiradiata (ə'kwib'it'rá diá) *n.* [L. *aequalis* equal *bis* twice *radius* ray] With two equal rays.
- equicellular (ə'kwib'it'sél'ulár) *n.* [L. *aequalis* equal *cellula*, cell.] Composed of equal cells.
- equifacial (ə'kwib'it'shál) *n.* [L. *aequalis* equal *facies* face.] Having equivalent surfaces or sides, as vertical leaves.
- equilateral (ə'kwib'it'serál) *n.* [L. *aequalis* equal *latus* side.] Having the sides equal *Appl.* shells symmetrical about transverse line drawn through umbo.
- equilin (ə'kwil'ín) *n.* [L. *equus* horse.] An oestrogenic hormone present in urine of the pregnant mare  $C_{19}H_{18}O_6$ .
- equilin (ə'kwil'ín) *n.* [L. *equus* horse.] An oestrogenic hormone, more physiologically active than equilenin, occurring in urine of the pregnant mare  $C_{19}H_{18}O$ .
- equipotent (ə'kwip'it'sént) *n.* [L. *aequalis* equal *potens* powerful.] Totipotent, *q.v.*
- equitant (ə'kwit'ánt) *n.* [L. *equitare* to ride.] Overlapping saddlewise, as leaves in leaf-bud.

equival *e* (ə'kwɪvəl) *a* [I *aequus* equal *mahe*, valve.] Having two halves of a shell like in form and size.

erect (ɛ'rekt) *a*. [L. *erigere* to raise up.] Directed towards summit of ovary *appl.* ovule; not decumbent.

erectile (ɛ'rek'tɪl) *a*. [L. *erigere* to raise up.] Capable of being erected.

erectile tissue, —a tissue capable of being made rigid by distention of blood-vessels within it.

erecton (ɛ'rek'shūn) *n*. [L. *erigere* to raise up.] The state of a part which has become swollen and distended through accumulation of blood in erectile tissue.

erector (ɛ'rek'tōr) *n*. [L. *erigere* to raise up.] A muscle which raises up an organ or part.

ereldasm (ɛ'reldəsm) *n*. [Gk. *ereldasia* to support *dasma* bond.] An epithelial intracellular fibre.

eremobite (ɛ'remō'bɪt) *a*. [Gk. *eremias* solitude *bios* life.] Growing or living in isolation having solitary existence.

eremochaetous (ɛ'remōkə'trəs) *a*. [Gk. *eremias* lonely *chaeta* bristle.] Having no regularly arranged system of bristles *appl.* flies.

eremophyte (ɛ'remō'fɪt) *n*. [Gk. *eremias* solitude *phytos* plant.] A desert plant.

eripin (ɛ'rep'ɪn) *n*. [L. *eripere* to set free.] A proteolytic enzyme of intestinal juice and body tissues.

ergatoid (ɛ'gātōɪd) *a*. [Gk. *ergon* work *eides* form.] Having the adults sexually capable though wingless.

ergastic (ɛ'gās'tɪk) *a*. [Gk. *ergastes* fit for working.] *Part* metaplasma *appl.* lifeless cell-inclusions, as fat starch etc.

ergatoplasma (ɛ'gās'tōplāzm) *n*. [Gk. *ergasthai* to work *plasma*, mould.] Archoplasm kinoplasm.

ergatoplastic (ɛ'gās'tōplāstɪk) *a*. [Gk. *ergasthai* to work *plasma* mould.] *Appl.* fibrillae of gland cells which may induce production of secretory granules.

ergatandromorph (ɛ'gātān drōmōrf)

*n* [Gk. *ergates* worker *anor* male *morpha* form.] A ant or other social insect in which worker and male characters are blended.

ergatandrous (ɛ'gātān drōs) *a*. [Gk. *ergates* worker *anor* man.] Having long worker-like males.

ergataner (ɛ'gātā nēr) *n*. [Gk. *ergates* worker *anor* male.] A male ant resembling a worker an ergatoid or ergatomorphic male.

ergate (ɛ'gāt) *n*. [Gk. *ergates* worker.] A worker-ant ergates.

ergatogyn (ɛ'gātō'gɪn) *n*. [Gk. *ergates* worker *gyn* female.] A female ant resembling a worker an ergatoid or ergatomorphic female.

ergatogynous (ɛ'gātō'gɪnəs) *a*. [Gk. *ergates* worker *gyn* woman.] Having worker like females.

ergatoid (ɛ'gātōɪd) *a*. [Gk. *ergates* worker *eides* form.] Resembling worker *appl.* ants ergatomorphic.

ergones (ɛ'gōnz) *n pl*. [Gk. *ergon* work.] Organic substances of which small amounts suffice for activation or regulation of physiological process, as enzymes, hormones, and vitamins also ergines.

ergonomy (ɛ'gōnəm) *n*. [Gk. *ergon* work *nomos* law.] The differentiation of functions physiological differentiation associated with morphological specialisation.

ergosterol —a sterol occurring in plants and animals with photochemical reaction products leading to formation of its isomer vitamin D  $C_{28}H_{44}O$

got (ɛ'gōt) *n*. [O F *ergot* *apo*] A small bare patch found on limbs of horse-tube representing last remnant of naked palm of hand and sole of foot condition of ovary of grames produced by a fungus *rye smut* sclerotium of *Claviceps* yielding several alkaloids, *ergotoxine* and *ergometrine* which stimulate uterine muscle.

erithoidina (ɛ'rɪk'thōɪ'dɪnə) *n*. [Gk. *erithaios* to break *eides* form.] Larval stage of Stomatopoda comparable with zoeae.

- erichthus** (érík thús) *n.* [Gk. *erakh* /*Aras* to break.] Larval stage of Stomatopoda comparable with pseudosquilla.
- ericoconous** (érík'ónús) *a.* [Gk. *erion* wool *kónos* hair] Having woolly hair fleece-haired.
- eri phyll** (ér'ífil'ús) *a.* [Gk. *erion* wool *phyllos* leaf.] Having leaves with cottony appearance.
- erose** (érós) *a.* [L. *erodere* to wear away] Having margin irregularly notched *apple* leaf, bacterial colony
- erosal** *a.* (érós'hín) *n.* [L. *erodere* to wear away] Decay which usually starts at apex of many gastropod shells.
- erostreat** (érós'tréit) *a.* [L. *er* without; *streatum* beak.] Having no beak *apple* anthers.
- erua** *ma* (ér'shün) *n.* [Gk. *erua* young] The free monogastic generation of Siphonophora.
- eruciform** (éruo sífúm) *a.* [L. *eruca* caterpillar *forma*, shape] Having the shape of or resembling caterpillar *apple* insect larvae *apple* spores of certain lichens.
- erumpent** (érüm pént) *a.* [L. *erumpere* to break out] Breaking through suddenly *apple* fungal hyphae.
- erythrin** (érith rín) *n.* [Gk. *erythros* red.] A red colouring matter found in certain algae and lichens  $C_{10}H_{10}O_{10}$ .
- erythrism** (érith rízm) *n.* [Gk. *erythra* red.] Abnormal presence, or excessive amount, of red colouring matter as in petals, feathers, hair *eggs* of rufohum.
- erythr blast** (érith róblist) *n.* *ph* [Gk. *erythros* red; *blastos* bud.] Nucleated cells, derived from mesoderm, which later contain haemoglobin and develop into red blood corpuscles.
- erythrocrucrin** (érith rokroo'órin) [Gk. *erythros* red L. *crucis* blood.] Red iron-containing respiratory pigment in some invertebrates.
- erythrocyte** (érith réth) *n.* [Gk. *erythros* red; *kytos* hollow] A red blood corpuscle.
- erythrocyte-maturing** *f* *ctor* — formed by action of pyloric gland secretion (intrinsic factor) on extrinsic factor in food, and stored in liver and necessary for maturation of red blood cells in bone-marrow symbol EMF
- erythrocytolysis** (érith réthól'ús) *n.* [Gk. *erythros* red *kytos* cell *lysis* lousing] Destruction of red blood corpuscles; haemolysis.
- erythr o** (érith réo) *n.* [Gk. *erythros* red *on* being] The red cells in bone marrow and circulating blood, collectively
- erythrophil us** (érithróf'íltis) *a.* [Gk. *erythros* red *philia* to love.] Having special affinity for red stains *apple* structures in cell or to type of cells.
- erythrophore** (érith rófor) *n.* [Gk. *erythros* red; *phoros* to bear] A reddish purple pigment bearing cell.
- erythrophyll** (érith rófil) *n.* [Gk. *erythros* red *phyllos* leaf.] A red colouring matter of some leaves and of red algae.
- erythr poeol** (érith ropoi'éis) *n.* [Gk. *erythros* red; *poiein* making] The production of red blood corpuscles.
- erythropala** (érithróp'ala) *n.* [Gk. *erythros* red *palus* slight.] Red colouring matter in insect eyes rhodopsin, *g* *g*
- erythrotin** (érith rótin) *n.* [Gk. *erythros* red.] Vitamin B<sub>12</sub> extracted from liver anti-pernicious anaemia factor and growth factor for certain micro-organisms.
- erythrosym** (érith rézm) *n.* [Gk. *erythros* red *syme* leaven.] An enzyme capable of decomposing ruberythric acid and acting upon glucosides.
- escape** (éskép') *n.* [M.E. *escapen*.] A plant originally cultivated, now found wild.
- escutcheon** (éskich'én) *n.* [O F. *escutcheon*, shield.] Area on rump of many quadrupeds which is either

- variously coloured or has the hair specially arranged mesoscutellum of certain insects. Ligamental area of certain bivalves.
- esoptate** (ěsɔp'tāt) *a.* [L. *ex* without *optōn* enclosure.] Not supplied with septa.
- esophagus**,—**oesophagus**, *g.s.*
- esoteric** (ěsɔt'ēr'ik) *a.* [Gk. *esōterikos* arising within.] Arising within the organism.
- espathate** (ěspāth'āt) *a.* [L. *ex* without *spatha*, broad blade.] Having no spathe.
- esquamate** (ěkwā māt) *a.* [L. *ex* without *spuma* scale.] Having no scale.
- essential oils**,—**volatile oils** composed of various constituents and contained in plant organs, with characteristic odour.
- esth**,—*see* **aesth**.
- estipulate** (ěstip ūlāt) *a.* [L. *s* without *stipula*, stem.] Having no stipules.
- estr**—*see* **oestr**.
- estuarine** (ěst'ūār'īn) *a.* [L. *æstuarium* estuary.] Pert. or found in an estuary. *Appl.* organisms.
- taerio** (ětē rīs) *n.* [Gk. *thalra* association.] A fruit composed of achenes or drupelets carried on an enlarged thalamus, or 1 foliole eteio.
- ethogenesis** (ěthōjēn ětis) *n.* [Gk. *ethos* youth *genesis* descent.] Parthenogenesis producing males development of a male gamete without fertilisation.
- Ethiopian** (ěthiō pīō) *a.* [Gk. *aitheps* burned face.] *Appl.* or *pert.* a oogeographical region including Africa south of the Sahara and southern Arabia and divisible into African and Malagasy sub-regions.
- ethmoxyostylic** (ěth mōl'ōstīf'ik) *a.* [Gk. *ethmos* sieve *xylos* T styles pillar.] With mandibular suspension from ethmoid region and hyoid bar.
- ethmoid** (ěth moid) *a.* [Gk. *ethmos* sieve *oides* shape.] Pert. bones which form considerable part of walls of nasal cavity.
- ethmoidal** (ěthmōidāl) *a.* [Gk. *ethmos* sieve *oides* shape.] Pert. ethmoid bones or region.
- ethmoidal notch**,—a quadrilateral space separating the two orbital parts of the frontal bone incisura ethmoidalis.
- ethmolytic** (ěth mōlīs'tīk) *a.* [Gk. *ethmos* sieve *lysis* to loosen.] Pert. an opeal system in which the madreporite extends backwards till it separates the two postero-lateral genitalia.
- ethmopalatine** (ěth mōpāl'ātīn) *a.* [Gk. *ethmos* sieve L. *palatus* palate.] Pert. ethmoid and palatine bones, or their region.
- ethmophract** (ěth mōfrākt) *a.* [Gk. *ethmos* sieve *phraxis* to fence in.] Pert. a simple compact, apical system with pores occurring only in right anterior corner.
- ethmoturbinals** (ěth mōtūr'bīnāl) *n. pl.* [Gk. *ethmos* sieve L. *turbo* whorl.] Cartilages or bones in nasal cavity which are folded so as to increase olfactory area.
- ethmoverine** (ěth mōvēr'īn) *a.* [Gk. *ethmos* sieve; L. *verum* ploughshare.] Pert. ethmoid and vomer regions *appl.* the cartilage which forms nasal septum in early embryo.
- ethnography** (ěthnōg rāfī) *n.* [Gk. *ethnos* nation *graphein* to write.] The description of the races of mankind.
- ethnology** (ěthnōl'ōjī) *n.* [Gk. *ethnos* nation *logos* discourse.] Science dealing with the different races of mankind their distribution relationship and activities.
- ethology** (ěthōl'ōjī) *n.* [Gk. *ethos* custom *logos* discourse.] *Bio-*nomics study of habits in relation to habitat study of behaviour.
- ethomerous** (ěthmēr'ūs) *a.* [Gk. *ethos* custom *meros* part.] Having the normal number of part or segments with normal number of chromosomes.
- etiolate** (ět'ōlīs shō) *n.* [F. *Atelier* to bleach.] Bleached condition produced in plant reared in darkness, or by disease.

**etioline** (é'ti:lin) *n* [F *étaler* to blanch] A yellowish pigment found in chloroplasts of plants grown in darkness protochlorophyll.

**etiology**—**aetiology** *q.v.*

**eupogamy** (é'póg'ám) *n*. [Gk. *eu* well *gá* away *gamos* marriage.] Diploid apogamy haploid pogamy being meiotic eupogamy.

**eustar** (é'stár) *n* [Gk. *eu* good *astér* star] An aster in which the rays meet at a common centre.

**scarple** (é'kárpík) *a*. [Gk. *eu* well *karpeí* fruit.] *Appl* Phycococci having rhizoids, or haustoria. *Opp* holocarpic.

**eutritic** (é'stót'ítik) *a*. [Gk. *eu* well *trítos* centre.] Pericentric *q.v.*

**euchephal** (é'káf'élis -é'f) *a*. [Gk. *eu* good *kephalé* head] With well-developed head *appl* certain insect larvae.

**euchromati** (é'krómát'ík) *a*. [Gk. *eu* well *chroma* colour] *Peri*

euchromatin *appl* chromosome regions which never become heteropycnotic. *Opp* heterochromatic.

**euchromatin** (é'krómátin) *n* [Gk. *eu* well *chroma*, colour] Chromatin making up bulk of chromosome and including active genes.

**euchromosome** (é'krómó'só's) *n* [Gk. *eu* well *chroma* colour *só's* body] A typical chromosome or autosome.

**eucocci** (é'kó'si) *n* [Gk. *eu* well *kókos* common.] Those members of a biocoenosis which are unable to live in different environment. *Opp* psychococci.

**eucone** (é'kón) *a*. [Gk. *eu* good *kónos* cone] Having crystalline cones fully developed in single elements of compound eye.

**euclipteral** (é'díptér'al) *a*. [Gk. *eu* good *éktis* double *phéron* side] Symmetrical about median plane bilaterally symmetrical.

**eudoxeme** (é'dók'sóm) *n* [Gk. *eu* *dóxo* glorious] Monogastic free swimming stage of a siphonophore without nectocytes.

**euamie** (é'gám'ík) *n* [Gk. *eu* well *gamos* marriage] *Appl* mature period *appl* agamic or youthful and aged or senescent.

**eugenic** (é'jén'ík) *a*. [Gk. *eu* well; *gamos* birth.] *Peri* or tending towards racial improvement.

**eugenics** (é'jén'íks) *n* [Gk. *eu* well *gamos* birth.] The science dealing with the factors which tend to improve or impel stock.

**euglenoid** (é'jén'í'noíd) *a*. [Gk. *eu* well *glōs* eyeball, puppet *ídōs* form.] *Peri* or like *Euglena* *appl* characteristic movement of *Euglena*.

**eulaline** (é'hál'in) *a*. [Gk. *eu* well *halos* saline.] Living only in saline inland waters of euryhaline.

**eumelanin** (é'mél'anin) *n* [Gk. *eu* well *melas* black.] Black melanin of pharomelanin.

**eumierism** (é'mér'íz'm) *n* [Gk. *eu* well *meros* part] An aggregation of like parts.

**eumieristem** (é'mér'ístém) *n* [Gk. *eu* well *meros* divided.] Meristem composed of monometric thin walled cells.

**eumierogenesis** (é'mér'jén'és'is) *n* [Gk. *eu* well *meros* part *gēnesis* descent.] Segmentation in which the units are similar at least for a certain time.

**eumitosis** (é'mító'sis) *n* [Gk. *eu* well *mitos* thread] Typical mitosis.

**eumitotic** (é'mítót'ík) *a*. [Gk. *eu* well *mitos* thread.] Anamorphic, *q.v.* *Peri* eumitosis.

**euphot** (é'fót'ík) *a*. [Gk. *eu* well *phos* light.] Well illuminated *appl* zone surface waters to depth of about 80 metres *ppr* layer of photic zone of dysphotic.

**euphot metri** (é'fót'émét'ík) *a*. [Gk. *eu* well *phos* light *metron* measure.] *Appl* leaves oriented to receive maximum diffuse light of panphotometric.

**euplasti** (é'plás'tík) *a*. [Gk. *eu* well *plastos* moulded.] Readily organised easily forming a theca.



- euploid** (ū plōid) *a.* [Gk. *eu* well *haplos* oocfold *eidos* form.] Polyploid when total chromosome number is an exact multiple of the haploid number *Opp* aneuploid
- upotamic** (ū pōt'āmīk) *a.* [Gk. *eu* well *potamos* river] Thriving both in streams and in their backwaters *Appl* potamoplankton.
- eupyrène** (ū pīrēn') *a.* [Gk. *eu* well *pyren* fruit-stone.] *Appl* sperms of normal type of apyrène of gopyrene.
- eurybaric** (ū rībār'īk) *a.* [Gk. *eury* wide *baros* weight.] *Appl* animals adaptable to great differences in altitude, *Opp* stenobaric.
- eurybathic** (ū rībāth'īk) *a.* [Gk. *eury* wide *bathos* deep.] Having large vertical range of distribution, *Opp* stenobathic.
- eurychoric** (ū rīkō'rīk) *a.* [Gk. *eury* wide *choros* place.] Widely distributed *Opp* stenochoric.
- eurycyst** (ū rīst) *n.* [Gk. *eury* wide *kystis* bladder] Large cell of middle vein in mosses deuter cell pointer cell.
- euryhaline** (ū rībāl'in) *a.* [Gk. *eury* wide *halinos* saline] *Appl* marine organisms adaptable to wide range of salinity *Opp* stenohaline.
- euryhygric** (ū rībā'grīk) *a.* [Gk. *eury* wide *hygras* wet.] *Appl* organisms adaptable to a wide range of atmospheric humidity
- euryphagous** (ū rī'fāgūs) *a.* [Gk. *eury* wide *phagō* to eat.] Subsisting on a large variety of foods *Opp* stenophagous *f* omnivorous
- eurypylous** (ū rīp'īlūs) *a.* [Gk. *eury* broad *pylos* gate.] Wide at the opening *Appl* canal system of sponges in which the chambers open directly into excurrent canals by wide apopykes, and receive water from incurrent canals through propopykes.
- eurysome** (ū rhōm) *a.* [Gk. *eury* broad *sōmos* body] Short and stout, *Opp* leptosome.
- eurythermic** (ū rīthēr mīk) *a.* [Gk. *eury* wide *thermos* heat.] *Appl* organisms adaptable to a wide range of temperature eurythermous, *Opp* stenothermic.
- eurytopic** (ū rībōp'īk) *a.* [Gk. *eury* wide *topos* place.] Having a wide range of geographical distribution *Opp* stenotopic.
- e sporangiate** (ū spōrān'jāt) *a.* [Gk. *eu* well *sporos* seed *angos* vessel.] Having sporogenous tissue derived from inner cell that follows periclinal division of superficial initial of leptosporangiate.
- Eustachian** (ūstāk'īān) *a.* [*B* Eustachio Italian physician]. Part tube or canal connecting tympanic cavity with pharynx; part valve guarding orifices of inferior vena cava in atrium of heart.
- eustele** (ūstēlē) *n.* [Gk. *eu* well *stela* pillar] The arrangement of vascular tissue into collateral or bicollateral bundles with conjunctive tissue between, as in gymnosperms and dicotyledons.
- eusternum** (ūstēr'nūm) *n.* [Gk. *eu* well *sternon* breastplate.] A sternal sclerite of insects anterior plate, basisternum.
- eustomatous** (ūstōm'ātūs) *a.* [Gk. *eu* well *stoma*, mouth.] Having a distinct mouth like opening
- eutelage** eals (ū'tēlājēn ēāls) *n.* [Gk. *eu* well *tele* into *ala* *gennais* descent.] Improved breeding by artificial insemination.
- euthenics** (ūthēn'īk) *n.* [Gk. *euthen* *eu* to thrive.] The science of betterment of human race on the side of intellect and morals the study of environmental agencies contributing to racial improvement.
- eutheria** (ūthē rīān) *a.* [Gk. *eu* well *therion* small animal.] *Appl* placental mammals with development uterine till full-time.
- euthycomous** (ūthīk'ūmūs) *a.* [Gk. *euthys* straight *homos* hal] Straight haired.
- e thynourous** (ū'thīnō rūs) *a.* [Gk. *euthys* straight *neurōn* nerve] Having visceral loop of nervous system untwisted.

utrophic (utrōf'ik) *a.* [Gl. *ex* well *trophic* nourishment] Providing or *fert.* adequate nutrition. *Opp.* dystrophic.

evagination (ēvāj'nik āshn) *n.* [L. out *evaginare*, abateh.] The process of unbecathing or product of this process an outgrowth.

evanesce (ēv ānēs ēnt) *a.* [L. *evanescere* to vanish.] Disappearing early, *appl.* flowers which fade quickly.

eversion (ēvēr'shūn) *n.* [L. out; *versare* to convey] Displacement of parent cell at septum of filament, causing dichotomous appearance, as in certain algae.

eviscerate (ēvis'ērāt) *v.* [L. *ex* out *viscera*, entrails.] To disembowel to effect the viscera as do benthurians on capture.

vocator (ēvōkātōr) *n.* [L. *evocare* call forth.] The chemical stimulus furnished by an organism *q.v.*

evolute (ēv'olūt) *a.* [L. *evolvere* to unroll.] Turned back unfolded.

evolutility (ēv'olūt'itē) *n.* [L. *evolvere* to unroll.] Capability to evolve or change in structure capacity to change in growth and form as result of nutritional or other environmental factors.

evolution (ēv'olūshn) *n.* [L. *evolvere* to unroll.] The gradual development of organisms from pre-existing organisms since the dawn of life.

exalat (ēksāl'āt) *a.* [L. *ex* without *ala*, wing] Not having wing-like appendages pterous.

exalbuminous (ēksāl'bū'mīnūs) *a.* [L. *ex* without *albumen* white of egg] Without albumen *appl.* seeds without endosperm or perisperm; exendospermous.

exannulate (ēksān'ulāt) *a.* [L. *ex* without *annulus* ring] Having sporangium not furnished with an annulus, *appl.* certain ferns.

exarat (ēksār'āt) *a.* [L. *exaratus* ploughed up.] *Appl.* pupa with free wings and legs.

exarch (ēks ārk) *n.* [L. *ex* without

Gl. *arche* beginning] With protoxylem strands outside metaxylem or in touch with pericycle.

exasperat (ēgrīs'pērāt) *a.* [L. *exasperare* to roughen.] F ribbed with hard stiff points.

excentric (ēksēn'trik) *a.* [L. *ex* out of *centrum*, centre.] One-sided having the two portions of lamina unequally developed.

exciple (ēks'ipī) *n.* [L. *excipula*, receptacles.] The marginal wall or outer covering of apothecium in certain lichens *excipulum*.

excitability—capacity of living cell, or tissue to respond to an environmental change or stimulus.

excitation (ēks'itāshn) *n.* [L. *excitare* to rouse.] Act of producing or increasing stimulation immediate response of protoplasm to a stimulus.

excitatory cells,—motor cells in sympathetic nervous system.

excitotrient (ēks'itōn'triēnt) *a.* [L. *excitare* to rouse *nutritus* feeding] Causing or increasing nutrient activities.

exconjugant (ēkskōn'jōgānt) *n.* [L. *ex* out *conjugare* to yoke.] An organism which is leading an independent life after conjugation with another.

excreta (ēkskrē'tā) *n. pl.* [L. *ex* *creare* separated.] Waste material eliminated from body or any tissue thereof deleterious substances formed within plant.

excrete (ēkskrēt') *v.* [L. *ex* out; *cernere* to sift.] To eliminate waste material from body to withdraw useless materials from the place of most active metabolism in plant.

excretion (ēkskrē'shūn) *n.* [L. *ex* out *cernere* to sift.] Act of eliminating waste material or the product of the elimination.

excurrent (ēkskrē'ēnt) *a.* [L. *ex* out *currere* to run.] *Fert.* ducts, channels, or canals in which there is an outgoing flow with undivided main stem having midrib projecting beyond apex.

excurred (ékakúrvd) *a.* [L. *ex* out; *currere* to curve.] Curved outwards from centre.

excystation (éks-áshl áshún) *n.* [L. *ex* out of Gk. *kystis* bladder] Emergence from encysted condition.

exendospermous (éks éndósper'mós) *a.* [L. *ex* without Gk. *endon*, within *sperma* seed.] Exalbuminous *g.s.*

exflagellation (éksflá, élláshún) *n.* [L. *ex* out of *flagellum* whip.]

Process of microgamete formation by microgametocyte in Haemaphysoida.

exfoliation (éksfoliáshún) *n.* [L. *ex* out *folium*, leaf.] The shedding of leaves or scales from a bud.

exhalant (éks'hálánt) *a.* [L. *ex* out *halare* to breathe.] Capable of carrying from the interior outwards.

exindusiate (éks'indúshíat) *a.* [L. *ex* out *indusium* cover] Having the sporangia uncovered or naked.

exin —extine *g.s.*

exin —extine *g.s.*

exiguinal (éks'ing'gwínál) *a.* [L. *ex* out *ignis* green] Occurring outside the groin *part* second joint of arachnid leg

exites (ék'shít) *n. pl.* [Gk. *exo* without.] Offshoots on outer lateral border of axis of certain arthropod limbs.

exocardiac (ék'sókar'díak) *a.* [Gk. *exo* without *kardia* heart.] Situated outside the heart.

exocarp (ék'sókárp) *n.* [Gk. *exo* without *karpis* fruit.] Outer layer of the pericarp epicarp

exoccipital (ék'sókárp'hál) *a.* [L. *ex* without *occiput* back of head.] *Part* a skull bone on each side of the foramen magnum.

exochiton (ék'sókr'tó) *n.* [Gk. *exo* without *chiton* coat.] Outer most layer of oögonial wall as in Fucales exochus of endochiton, mesochiton

exochori n (ék'sókr'shón) *n.* [Gk. *exo* without *chorion* chorion.] Outer layer of membrane secreted by follicular cells surrounding the egg in ovary insects.

exocoel (ék'sóshl) *n.* [Gk. *exo* without *coela* hollow] The space

between mesenteries of adjacent couples in certain Zootharia exocoelom *g.s.*

exocoelar (ék'sóshl'ár) *n.* [Gk. *exo* without *coela* hollow] *Part* parietal wall of coelom.

exocoellic (ék'sóshl'ík) *a.* [Gk. *exo* without *coela* hollow] 1 Zootharia, *part* space between adjacent couples of mesenteries *appl* radial arms on disc *appl* outermost cycle of tentacles.

exocoelom (ék'sóshl'lóm) *n.* [Gk. *exo* without *coela* hollow] Extra-embryonic body cavity of embryo.

exocone (ék'sóshl'ón) *n.* [Gk. *exo* without *konos* cone.] *Appl* insect compound eye with cones of cuticular origin.

exocrine (ék'sóshl'ín) *a.* [Gk. *ex* without *krinon* to separate.] *Appl* glands whose secretion is drained by ducts of endocrine

epocrine.

exocuticle (ék'sóshl'ík'lís) *n.* [Gk. *exo* without L. *dim.* of *cutis* skin.] Middle layer of insect cuticle between endocuticle and epicuticle outer layer of integument in spiders.

exoderm (ék'sóshl'ér'm) *n.* [Gk. *exo* without *derme* skin.] The dermal layer of sponges.

exodermis (ék'sóshl'ér'm's) *n.* [Gk. *exo* without L. *dermis* skin.] A specialised layer below the paliferous layer ectoderm *g.s.*

exonym (ék'sóshl'ín) *n.* [Gk. *exo* outside *onym* heaven.] Any extracellular enzyme.

exogamet (ék'sóshl'mét) *n.* [Gk. *exo* without *gamete* mate] A reproductive cell which fuses with one derived from another source

exogamy (ék'sóshl'ám) *n.* [Gk. *exo* without *game* marriage] Conjugation or fusion of isogametes with others of different brood outbreeding

exogastric (ék'sóshl'áshl'ík) *n.* [Gk. *exo*, without; *gaster* stomach.] Having the bell coiled towards dorsal surface of body

**exogastrula** (ék'adgás'tróols) *n* [Gk. *exo* without; *gaster* stomach.] An hour-glass shaped sea-urchin larva induced experimentally.

**exogeous** (ék'soj'énús) *a*. [Gk. *ex* outside; *geos* producing] Originating outside the organism, developed from superficial tissue, the superficial meristem; growing from parts which were previously ossified *appl.* metabolism concerned with effector activities and temperature.

**exognathil** *n* (ék'sógnúth'lón) [Gk. *exo* without *gnathos* jaw] The maxillary portion of upper jaw; the maxilla with exception of endognathion and mesognathion.

**exo-intine** (ék'sóin'tín) *n* [Gk. *exo* without *L. intus* within.] Middle layer of spore-covering between exine and intine.

**exonephri** (ék'sónéf'rik) *a*. [Gk. *exo* without *nephros* kidney] With nephridia opening exterior *appl.* enteronephric, *appl.* Oligochaeta.

**exoperidium** (ék'sopéríd'tím) *n* [Gk. *exo* without *peridium* small wallet.] The outer layer of spore case in certain fungi *epiperidium*.

**exophylaxis** (ék'sófilák'sis) *n*. [Gk. *exo* without *phylax* guard.] Protection afforded against pathogenic organisms by skin secretions.

**exoplasm** (ék'sopílm) *n* [Gk. *ex* without *plasma*, mould.] Ectoplasm, *q.v.*

**exopodit** (ék'sópódít) *n*. [Gk. *ex* without *podis* foot] The outer branch of typical biramous crustacean limb.

**exoscopy** (ék'sóskóp'ík) *a*. [Gk. *exo* without *skopos*, to look.] With *pex* emerging through archegonium *appl.* embryo. *Opp.* endoscopic.

**exoskeleton** (ék'sóskél'itón) *n*. [Gk. *exo* without *skelos* hard.] A hard supporting structure secreted by ectoderm or by skin.

**exosmosis** (ék'sósmós'sis) *n*. [Gk. *exo* without *smos* impulse.] The passing out through membrane of gas or fluid. *Opp.* endosmosis.

**exospore** (ék'sópór) *exosporium*

(ék'sópór'tím) *n* [Gk. without *sporus* seed.] Outer coating of sporangial wall a conidium.

**exost me** (ék'sóstém) *n* [Gk. *exo* without *stoma* mouth.] Opening or foramen in outer wall of ovule.

**exostosis** (ék'sóstós'is) *n*. [Gk. *exo* without *stoma*, bone] Formation of knots on surface of wood; formation of knob-like outgrowths of bone at a damaged portion, or of dental tissue in similar way.

**exotheca** (ék'sóthéká) *n*. [Gk. *exo* without *theka* box.] The extra capsular tissue of a coral.

**exothecal** (ék'sóthékál) *a* [Gk. *exo* without *theka* box.] Pertaining outside the theca of a coral.

**exothecate** (ék'sóthékát) *a*. [Gk. *exo* without *theka* box.] Having an exotheca.

**exothecium** (ék'sóthéká'wím) *n*. [Gk. *exo* without *theka* case.] The outer specialised dehiscing cell layer of the gymnosperm sporangium of endothecium.

**exoti** (ésgót'ík) *a*. [Gk. *exotikos* foreign.] Introduced or non-endemic. *n*. A foreign plant or animal not acclimatized.

**exospore** (ék'sóspór) *n*. [Gk. *exos* outward *sporus* seed.] A sporozoite.

**exotoxin** (ék'sétsók'sín) *n*. [Gk. *exo* without *toxikos* poison.] A soluble toxin excreted by bacteria *appl.* endotoxin.

**exotropism** (ék'sót'róplizm) *n*. [Gk. *exo* without *trope* turn.] Curvature way from axis, exhibited by laterally geotropic organ.

**expantin**,—presumable neurohumor inducing expansion of chromatophores in crustaceans. *Opp.* contractin.

**expiration** (ék'spírá'shén) *n*. [*L. ex* out *spans* to breathe.] The act of emitting air from lungs emission of carbon dioxide by plants and animals.

**xplantation** (ék'splántá'shún) *n*. [*L. ex* out of *planta* to plant.] Tissue culture way from organism of its origin.

explosive—*apfl* flowers in which pollen is suddenly discharged on decompression of stamens by alighting insect, as of *Cytisus* and *Ulex* *apfl* fruits with sudden dehiscence, seeds being discharged to some distance *apfl* evolution rapid formation of numerous types tachytogonensis *apfl* speciation rapid formation of species from a single species in one locality

expressivity—the degree to which gene produces an effect.

exsculptate (eks skulp'tat) *a.* [L. *ex* out *sculps* to carve.] Having the surface marked with more or less regularly arranged raised lines with grooves between.

exscutellate (eks skut'ellat) *a.* [L. *ex* without *scutellum* small shield.] Having no scutellum *apfl* insects.

extended (eks tē'ted) *a.* [L. *extendere* to stretch out.] Protruding beyond some including organ or part *apfl* stamens which project beyond corolla.

exsertile (eks sēr'til) *a.* [L. *exterior* to stretch out.] Capable of extrusion.

exstipulat (eks tip'ulat) *a.* [L. *ex* without *stipula* stem.] Without stipules.

extrophy (eks strō'fī) *a.* [Gk. *exo* outwards *strophē* turning.] Eversion, as normal or anomalous projection of lateral tissue t. exterior of ovary.

exsufflation (eks sūf'flā shn) *n.* [L. *ex* out *sufflare* to blow.] Forced expiration from lungs.

extend (eks tēnd') *v.* [L. *ex* out *endere* to stretch.] To straighten out *apfl* to flex or bend any organ.

extensor (eks sēn sūr) *n.* [L. *ex* out *endere* to stretch.] Any muscle which extends a limb or part. *Opp* flexor.

exterior (eks tēr'iōr) *a.* [L. *externus* on outside.] Situated on side way from axis or definitive plane.

external (eks tēr'nāl) *a.* [L. *stermus* outside.] Outside or near the outside way from the mesial plane.

externum (eks tēr'nūm) *n.* [L. *ex* *stermus* outward.] Outer region or cortex of a mitochondrion or of Golgi apparatus.

exteroceptor (eks tēr'tēp'tōr) *n.* [L. *exter* outside *capere* to take.] A receptor which receives stimuli from outside the body; a contact receptor or distance receptor.

extine (eks tīn) *n.* [L. *exter* outside.] Outer coat of spore or pollen grain exosporium. *Opp* intine.

extra-axillary (eks trā-aks'ilārī) *a.* [L. *extra*, beyond *axilla*, armpit.] Arising above axil of leaf said of branches which develop from upper bud when there are more than one in connection with axil.

extrabranial (eks trābrān'kiāl) *a.* [L. *extra*, beyond Gk. *brankhē*, gills.] Arising outside the branchial arches.

extracapsular (eks trāk'ap'sulār) *a.* [L. *extra* outside; *capsula* small box.] Arising or situated outside a capsule *apfl* ligaments, etc. in connection with joint *apfl* protoplasm lying outside the central capsule i some protozoa *apfl* dendrites.

extracellular (eks trāks'el'lār) *a.* [L. *extra*, outside *cellula*, little cell.] Occurring outside the cell diffused out of the cell.

extracolumella (eks trākol'ūmēl'ā) *a.* [L. *extra* beyond *columella*, small column.] Distal element of auditory skeletal structure also hyostapes.

extra embryonic (eks trāēm'briōn'ik) *a.* [L. *extra* outside Gk. *embryon* foetus.] Situated outside the embryo proper as portion of blastoderm.

extra nt etc (eks trāntēr'ik) *a.* [L. *extra* outside Gk. *enteron* gut.] Outside the alimentary tract.

extrafloral (eks trāfl'ōrāl) *a.* [L. *extra* outside *flor* flower.] Situated outside the flower *apfl* nectaries.

extrafoveal (eks trāfō'fēl) *a.* [L. *extra* beyond *fovea*, depression.] *Part* macula i tea surrounding fovea centralis *apfl* rod vision. *Opp* foveal.

extran clear (Ek strānū'klār) *a.* [*L. extra*, outside *nucleus* kernel.] *Peri.* structures or forces acting outside the nucleus situated outside the nucleus.

extraocular (Ek'strōlōk'ūlār) *a.* [*L. extra*, outside *oculus* eye.] *Ex*terior to the eye *appl.* antennae of insects.

extraperitoneal,—subperitoneal.

extraspicular (Ek'strāspīk'ūlār) *a.* [*L. extra*, outside; *spicula*, small spike.] With spicules having one end embedded in spongin and the other end free.

extrastapedial (Ek'strāstāpē'dīāl) *a.* [*L. extra* beyond; *stapes* stirrup.] Extending beyond the stapedio-columellar junction.

extrastelar (Ek'strāstēl'ār) *a.* [*L. extra*, outside *Gk. stela* column.] *Peri* ground tissue outside vascular tissue.

extravaginal (Ek'strāvāj'īnāl) *a.* [*L. extra* outside *vagina*, sheath.] Forming way through the sheath as shoots of many plants.

extravasate (Ek'strāv'āst) *v.* [*L. extra*, outside *vas* vessel.] *T* force his way from the proper channel into the surrounding tissue, said of blood etc.

extraventricular (Ek'strāvēntrīk'ūlār) *a.* [*L. extra*, beyond *ventriculus* belly] Situated or arising beyond the ventricle.

extraxylary (Ek'strāxīl'ārī) *a.* [*L. extra*, outside *Gk. xylem*, wood.] On the outside of the xylem *appl.* fibres.

extralimby (Ek'strēm'itī) *a.* [*L. ex* *trans* limit.] The limb or distal portion of limb distal end of any limb-like structure.

extrinsic (Ek'strīn'sīk) *a.* [*L. ex* *trans* on outside.] *Peri.* muscles not wholly within the part *appl.* brightness due to objective light intensity *Opp* intrinsic.

extroverse (Ek'strōv's) *a.* [*L. extro* outwardly] Turned away from axis *appl.* dehiscence of anthers.

exudation (Ek'sūdā'shūn) *n.* [*L. ex* *trans* to sweat.] Any discharge

through an incision or pore of gums, resins, moisture, etc.

exumbrel (Ek'sūm'brāl) *a.* [*L. ex* out *umbra* shade.] *Peri* rounded upper surface of jelly-fish.

exumbrella (Ek'sūmbrel'ā) *n.* [*L. ex* out; *umbra*, shade.] Upper convex surface of jelly-fish.

exuvia (Ek'sū'vīē) *n. pl.* [*L. ex* *trans* to strip off.] Cast-off skins, shells, etc. of animals.

exuvial (Ek'sū'vīāl) *a.* [*L. ex* *trans* to strip off.] Ecdysial *appl.* insect glands whose secretion facilitates ecdysis.

eye (ī) *n.* [*A.S. āge*] The organ of sight or vision a pigment spot in various animals and in lower plants the bud of tuber

eye-spots,—certain pigment spots in many lower plants and animals and also in some vertebrates, which are supposed to have a visual function ocelli.

eye-t th,—upper canine teeth.

## F

*F*<sub>1</sub>—denotes first filial generation, or hybrids arising from first cross, successive generations arising from this one being denoted by *F*<sub>2</sub>, *F*<sub>3</sub>, etc. *P* denotes parents of *F* generation, *P* the grandparents, etc.

fabella (fābēl'ā) *n.* [*L. fabella*, small bean.] A small fibro-cartilage ossified in the gastrocnemius.

fabiform (fāb'ifōrm) *a.* [*L. faba*, bean *forma*, shape.] Bean-shaped.

Fabrician [*J. C. Fabricius* Danish entomologist]. *Appl.* classification of the Arthropoda based on the anatomy of the mouth-parts.

facet (fā'sēt, fā'sēt) *n.* [*L. facies* face.] A smooth, flat, or rounded surface for articulation an ocellus corneal portion of insect eye.

facial (fā'shāl) *a.* [*L. facies* face.] *Peri.* face *appl.* artery nerve bone, vein, etc.

**faciation** (făsh'zhūn) *n.* [*L. facies* face.] Formation or character of facies a grouping of dominant species within an association geographical differences in abundance or proportion of dominant species in a community of location.

**facies** (făsh'ēts) *n.* [*L. facies* face.]

The face a surface, in anatomy the general aspect of a plant aspect, as superior and inferior a particular modification of a biotope a grouping of dominant plants in the course of a successional series one of different types of deposit in a geological series or system the paleontological and lithological character of a deposit.

**facilitation** (făsh'itshūn) *n.* [*L. facilitas* easiness.] Diminution of resistance to a stimulus subsequent to previous stimulation, as of nerves Ger. *Bähmung*

**faciolingual** (făsh'ōling'gwāl) *n.* [*L. facies* face / *lingua* tongue.] Pert. or affecting face and tongue.

**factor** (făk'tō) *n.* [*L. facer* to make.] Any agent (beotic, climatic, nutritional etc.) contributing to a result Mendelian factor or gene determinant.

**factorial** (făk'tō riāl) *a.* [*L. facer* to make] Pert. genetic factors or genes.

**facultative** (făk'ulsh'iv) *a.* [*L. facultas* faculty] Having the power of living under different conditions conditional *appl.* organisms which may be normally self-dependent but which are adaptable to a parasitic or semiparasitic mode of life *appl.* aerobes, anaerobes *appl.* parthenogenesis symbionts, saprophytes gametes etc. *Opp.* obligate

**feces** (fē's) *n. plu.* [*L. feces* drops] Excrement from alimentary canal

**falcate** (făl'kāt) *a.* [*L. falx* sickle.] Sickle-shaped hooked.

**falces** (făl'sēs) *n. plu.* [*L. falces* sickles] Cheliceræ [arachnids]

**falciform** (făl'ifōrm) *a.* [*L. falx* sickle *farma* shape] Sickle-shaped or scythe-shaped *appl.*

ligament a dorso-ventral fold of peritoneum, attached to under surface of diaphragm and anterior and upper surfaces of liver *appl.* process processus falciformis, a fold of choroid penetrating retina near optic disc and ending at back of lens, functioning in accommodation in teleosts *appl.* body a sporozoite.

**falcula** (făl'kūlā) *n.* [*L. falcula* little hook.] A curved scythe-like claw

**falculate** (făl'kūlāt) *a.* [*L. falcula* little hook.] Curved and sharp at the point.

**Fallopian tube** [*G. Fallopius* Italian anatomist]. Uterine tube upper portion of oviduct in mammals anterior portion of the Müllerian duct.

**false** or **ast. real ribs**,—those ribs whose cartilaginous ventral ends do not join the sternum directly

**false vocal cords**,—ventricular folds of larynx two folds of mucous membrane each covering a ligament, anterior to true vocal cords.

**falx** (fălks) *n.* [*L. falx* sickle] A sickle-shaped fold of the dura mater unguinal ponsurosis of transverse and internal oblique muscles of abdomen.

**family** (făm'ī) *n.* [*L. familia* household] Term used in classification signifying group of related genera families being grouped into orders.

**fan** (făn) *n.* [*A.S. fann* fan.] A bird tail feathers a flabellum *g.n.* rhaphidum *g.n.* vanus, *g.n.*

**fang** (făng) *n.* [*A.S. fang* grip.] A long-pointed tooth, especially the poison tooth of snakes the root of a tooth.

**faradisation** (fă'rădēsh'zhūn) *n.* [*Al. Faraday* English physicist]. Method of stimulation inducing partial or complete tetanus

**farctate** (făk'tāt) *a.* [*L. farctus* stuffed.] Filled not hollow

**farina** (fă'tūk făr'īnā) *n.* [*L. farina* flour] The pollen of plants the fine meal-like powder found on some insects.

**farinaceous** (fâr'înîshûs) *n.* [*L. farina* flour] Containing flour starchy farinose.

**farinose** (fâr'înôz) *a.* [*L. farina*, flour] Producing or covered with, fine powder or dust.

**fascia** (fâ'shî, fâsh'îa) *n.* [*L. fascia*, band.] An ensheathing band of connective tissue.

**fascial** (fâ'shî) (fâsh'îâ) *a.* [*L. fascia* bundle.] *Part.* a fascia, ensheathing and binding

**fasciated** (fâ'shî'âtd, fâsh'îâ'têd) *a.* [*L. fascis* bundle.] Banded; arranged in fascicles *appl.* stems or branches malformed and flattened.

**fasciation** (fâshî'âshn) *n.* [*L. fascis*, bundle.] The formation of fascicles coalescent development of branches of a shoot-system as in canflower

**fasciel** (fâ'shî) *n.* [*L. fasciculus* small bundle.] A small bundle or tuft, as of fibres or of leaves.

**fascicular** (fâ'shî'ulâr) *a.* [*L. fasciculus* small bundle.] *Part.* fascicle arranged in bundles or tufts *appl.* cambium tissue.

**fasciculus** (fâ'shî'ulûs) *n.* [*L. fasciculus* small bundle.] A fasciel group, bundle, or tract of nerve fibres as of medulla spinalis.

**fasciola** (fâ'shîâ) *n.* [*L. fasciola*, small bandage.] A narrow colour band delicate lamina continuous with repræcoxal gym.

**fasciol** (fâ'shî) *n.* [*L. fasciola*, small bandage.] Caliated band on certain echinoids for sweeping water over surrounding parts.

**fastigate** (fâ'stî'gât) *a.* [*L. fastigare* slope up.] With branches close to stem and erect *appl.* patent in pyramidal or conical form.

**fastigi** *m.* (fâ'stî'gîum) [*L. fastigium*, gable.] Angular top of roof of fourth ventricle, formed by contact of anterior and posterior medullary vela of cerebellum.

**fat** (fât) *n.* [*A.S. fætt*, fat.] Adipose tissue any part of animal tissue which has its cells filled with greasy or oily reserve material.

**fat body**,—one of the vascularised tissue structures filled with fat globules and associated with gonads in Amphibia one of the subcutaneous organs along ventral sides and enlarged during breeding season in Lacertilla tissue of indeterminate form distributed throughout body of insects and functioning as nutritive reserve corpus adiposum; epiploon.

**fat soluble**,—*appl.* vitamins A D E, and K.

**fatigue** (fâtîg) *n.* [*L. fatigare* to weary] Effect produced by long stimulation on cells of an organ.

**fauces** (fô'stîs) *n. pl.* [*L. fauces* throat.] Upper or anterior part of throat between palate and pharynx; mouth of a spirally coiled shell; throat of a corolla.

**fons** (fôn's) *n.* [*L. fons* god of woods.] All the animals peculiar to a country area, period.

**faunal r. gior**,—an area characterised by a special group or groups of animals.

**fauna** (fôn'ûs) *n.* [*Dim. of fons*.] Animal population of small unit area, as of intestine bark, etc.

**favella** (fâvê'lâ) *n.* [*L. favus* honeycomb.] A conceptacle of certain red algae.

**favellate** (fâ'vêllât) *a.* [*L. favus* hive of bees honeycomb] Honeycombed or alveolate.

**favolus** (fâv'ô'ulûs) *n.* [*L. favus* small honeycomb.] A small depression or pit alveola.

**favoid** (fâv'ôid) *a.* [*L. favus* honeycomb *Gk. also form.*] Resembling a honeycomb.

**f** *os* (fâv'ô's) *a.* [*L. favus* honeycomb.] Honeycombed alveolate.

**feather veined**,—*appl.* leaf in which veins run out from mid-rib in regular series at an acute angle pinnately veined.

**fœces**,—feces.

**Fechner' Law** [*G. I. Fechner* German psychophysicist] The tendency of intensity of sensation to vary as the logarithm of the stimulus.



- fecundity** (fēkūn dhi) *n.* [*L. fecundus* fertile.] Power of species to multiply rapidly capacity to form reproductive elements.
- female** (fē māl) *n.* [*L. femina* women.] A pistillate flower an egg producing ♀ young producing animal—symbol ♀
- femal pronucleus**,—the uclens left in the ovum after maturation.
- femoral** (fēm ōrāl) *a.* [*L. femur* thigh.] *Part.* thigh *appl* artery vein, nerve, etc. crural.
- femur** (fē mū) *n.* [*L. femur* thigh.] The thigh-bone, proximal bone of hind limb in vertebrates third joint in insect and spider leg counting from proximal end.
- fenchone** (fēn chōn) *n.* [*Ger Fenchel* fennel.] A ketone, the essential oil in oil of fennel  $C_{10}H_{16}O$
- fenestra** (fēn's'trā) *n.* [*L. fenestra* window] An opening in a bone, or between two bones or in a plant membrane pit on head of cockroach a transparent spot on wings of insects.
- fenestrate** (fēn's'trāt) *a.* [*L. fenestra* window] Having small perforations or transparent spots, *appl* insect wings having numerous perforations, *appl* leaves, dissepiments.
- fenestrated membrane**,—a close network of yellow elastic fibres resembling membrane with perforations, as in inner tunic of arteries.
- fenestrula** (fēn's'troōf) *n.* [*Dim.* of *L. fenestra* window] Small opening between branches of polyzoon colony
- feral** (fē rāl) *a.* [*L. fera* wild animal] Wild, or escaped from cultivation domestication and reverted to wild state.
- ferment** (fēr'mēnt) *n.* [*L. fermentum* ferment.] An organised substance, capable of producing fermentation an enzyme.
- fermentation** (fēr'mēntā shōn) *n.* [*L. fermentum* ferment] A transformation occurring in organic substance usually of carbohydrate caused by action of ferment symosa.
- ferruginous** (fērōojinūs) *a.* [*L. ferrugineus* rusty] Having the appearance of iron rust.
- fertile** (fēr'til) *a.* [*L. fertilis* fertile.] Capable of producing living offspring of eggs or seeds, capable of developing
- fertilisation** (fēr'tifkē shōn) *n.* [*L. fertilis* fertile.] The union of male and female pronuclei pollination.
- fertilisation tube**,—process of an antheridium penetrating oogonal wall, for passage of male gamete in certain fungi.
- fertility vitamin**,—tocopherol or vitamin E anti-sterility vitamin.
- fertilizin** (fēr'til'zin) *n.* [*L. fertilis* fertile.] A soluble colloidal substance produced by certain eggs and causing sperm agglutination also inducing cleavage
- festoon** (fēstōon) *n.* [*F. festum* garland.] The margin with rectangular divisions, of integument in ticks.
- fetlock** (fēt'łōk) *n.* [*Ice.* *fet* step *lōkka* tuft of hair] The tuft of hair behind a horse pastern joint the pastern joint tuft
- fetus**,—see foetus.
- fibre** (fībēr) *n.* [*L. fibra* band.] A strand of nerve muscle connective or bast tissue elongated plant-cell for mechanical strength fiber
- fibre tracheids**,—fibres of a nature intermediate between that of libriform fibres and of tracheids.
- fibril** (fībriļ) *n.* [*L. fibrilla* small fibre.] A small thread-like structure or fibre component part of fibre root hair a slender filiform outgrowth on some lichens.
- fibrillae** (fībriļ ē) *n. plu.* [*L. fibrilla* small fibre.] Thread-like branches of roots minute elastic fibres secreted within spongy cells; minute muscle-like thread found in various infusorians fibrils.
- fibrillate** (fībriļāt) *a.* [*L. fibrilla* small fibre.] Having fibrillae or hair-like structures.

**fibrillose** (fībril'ōs, fibril'ōs) *a.* [*L. fibrilla* small fibre.] Furnished with fibrils *appl.* mycelia of certain fungi.

**fibrin** (fībrin) *n.* [*L. fibra*, band.] An insoluble protein found in blood after coagulation readily digested in gastric juice.

**fibrinogen** (fībrin'ōjēn) *n.* [*L. fibra*, band *Gk. -genes* producing] A soluble protein of blood which, by activity of thrombin yields fibrin and produces coagulation.

**fibroblast** (fībrōb'lāst) *n.* [*L. fibra* band *Gk. blastos* bud.] A connective tissue cell fibrocyte, desmocyte.

**fibro-cartilage** (fībrō-kār'tilēj) [*L. fibra*, band; *cartilago* gristle.] A kind of cartilage whose matrix is mainly composed of fibres similar to connective tissue fibres, found at articulations, cavity margins, and osseous grooves.

**fibrous** (fībrōs) *a.* [*L. fibra*, band.] Composed of fibres *appl.* tissue, roots, mycelium, etc.

**fibula** (fīb'ulā) *n.* [*L. fibula* buckle] Outer and smaller shin bone.

**fibular** (fīb'ulār) *a.* [*L. fibula*, buckle.] The outer element of proximal row of tarsus.

**field**,—a dynamic system in which all the parts are interrelated and in equilibrium, so that a change in any part affects the whole.

**filament** (fil'mēnt) *n.* [*L. filum* thread.] A thread-like structure the stalk of anther; bypha, *g.* stalk of down-feather cryptopile slender apical end of egg-tube of insect ovary

**filamentous** (filāmēn'tūs) *a.* [*L. filum* thread.] Thread-like having filaments *appl.* form or margin of certain bacterial colonies.

**filial generation**,—*F* etc., *g.*

**filial regression**,—tendency of offspring of outstanding parentage to revert to verge for species.

**filicinulin** (fil'ikūl'in) *a.* [*L. filum* thread *caulis* stalk.] With thread-like stem.

**filiciform** (fil'ikōfōrm) **filicoid** (fil

ikoid) *a.* [*L. filix* fern *form* shape *Gk. eidos* form] Shaped like the frond of a fern fern-like.

**filiform** (fil'ifōrm) *a.* [*L. filum* thread *forma*, shape.] Thread like.

**filiform papillae**,—papillae on the tongue ending in numerous minute slender processes.

**filigerous** (fil'ijērūs) *a.* [*L. filum* thread *gerere* to carry] With thread-like outgrowths or flagella. **Filippi's glands**,—paired glands with ducts conveying viscid secretion into silk ducts.

**fillet** (fil'ēt) *n.* [*L. filum* thread.] Band of white matter in mid-brain and medulla oblongata lemniscus.

**filoplume** (fil'ōploom) *n.* [*L. filum* thread *plume* feather] A delicate hair-like feather with long axis and few free barbs at per.

**filipodia** (fil'ipō'diā) *n. pl.* [*L. filum*, thread *Gk. podos* foot.] Protozoan thread-like pseudopodia.

**filose** (fil'sē) *a.* [*L. filum*, thread.] Slender, thread-like *appl.* pseudopodia of protozoa.

**filter-passers**,—organisms capable of passing through a filter which arrests bacteria; microhemads viruses.

**filtration** (fil'trā shūn) *n.* [*F. filter* to strain.] *Appl.* lacrimal angle of cornea straining as of lymph through capillary walls.

**filum terminale**,—the terminal thread slender grey filament, of the spinal cord.

**frimbria** (fīm'briā) *n.* [*L. frimbria*, fringe.] Any fringe-like structure posterior prolongation of fornix to hippocampus one of delicate processes fringing the mouth of tube or duct, as of oviduct, or of siphon of molluscs.

**frimbriated** (fīm'briā'ted) *a.* [*L. frimbria*, fringe.] Fringed at margin as petals, tubes, ducts antennae.

**fin** (fin) *n.* [*A.S. fenn, fin*] A fold of skin with fin-rays and skeletal supports, in most fishes.

**finials** (fín'álz) *n. pl.* [L. *finis* end.]  
The ossicles of the distal ramus of  
crinoids which do not branch  
again.

**fin-rays**,—horny supports of fins.

**fililingual** (fí'líng'gwál) *a.* [L.  
*filus* cleft *lingua* tongue.] With  
bifid tongue.

**fission** (físh'ón) *n.* [L. *filus* cleft.]  
Cleavage of cells division of a  
unicellular organism into two or  
more parts.

**filiparous** (físp'árús) *a.* [L. *filus*  
cleft *parere* to beget.] Repro-  
ducing by fission.

**filip d** (fí'típd) *n.* [L. *filus* cleft  
*pes* foot.] Web cleft feet that is,  
with digits of feet separated.

**filistral** (fí'trál'strál) *a.* [L. *filus*  
cleft *rostrum* beak.] With deeply-  
cleft beak.

**fiure** (físh'úr) *n.* [L. *filus* cleft.]  
A cleft, deep groove or furrow  
dividing an organ into lobes, &  
subdividing and separating certain  
areas of the lobes sulcus.

**fistula** (fí'stúla) *a.* [L. *fistula* pipe.]  
Pathological or artificial pipe-like  
opening trachea water-conduct-  
ing vessel.

**fistular** (fí'stúlar) *a.* [L. *fistula*  
pipe.] Like a fistula pipe-like  
bollow as stems of Umbellifera.

**fix** (fíks) *v.* [L. *fixus* fixed.] T kill  
and preserve to establish to  
retain.

**fixati n muscles**,—muscles which  
prevent disturbance of body equi-  
librium generally and fix limbs in  
case of limb-movements.

**filial** (fíbel'ál) *a.* [L. *filialis*  
to fan.] Fan-shaped *appl* pecti-  
nate antennae with long processes.

**filialiform** (fíbel'ál'fórm) *a.* [L.  
*filialis* fan *forma* shape.]  
Fan-shaped.

**filialinerved** (fíbel'ál'nérvd) *a.* [L.  
*filialis* fan *nervus* nerve.]  
*Appl* leaves with many radiating  
nerves.

**filialum** (fíbel'úm) *n.* [L. *filialis*  
fan.] Any fan-shaped organ  
or structure distal *etc* of bran-  
chiopodan limb epipodite *f*

certain crustacean limbs terminal  
lobe of gloxa in certain insects.

**flagellate** (fláj'elát) *a.* [L. *flagellum*  
whip.] Furnished with flagella  
like a flagellum.

**flagelliform** (fláj'el'í'fórm) *a.* [L.  
*flagellum* whip *forma* shape.]  
Lash-like like flagellum.

**flagellula** (fláj'el'úla) *n.* [L. *flagel-  
lula* dim. of *flagellum* whip.] A  
flagellate zoospore or flagell  
spore.

**flagellum** (fláj'el'úm) *n.* [L. *flagel-  
lum* whip.] The lash-like process  
of many Protista and of cells as in  
choanocytes and certain male  
gametes external structure on  
basal joint of chelicera of Pseudo-  
scorpiones distal part of antenna in  
some arthropods as in Diptera;  
a long slender runner or creeping  
stem.

**flame cell**—the terminal cells of  
branches of excretory system in  
many worms, with cavity continuous  
with lumen of duct, and containing  
a cilium or bunch of cilia, the  
motion of which give a flickering  
appearance similar to that of a  
flame a procoeloderm.

**flavido** (fláv'ído) *n.* [L. *flavus*  
yellow.] Exocarp of hesperidium  
of albedo.

**flavescens** (fláv'es'ens) *a.* [L. *flav-  
escere* to turn yellow.] Growing  
yellow.

**flavin** (flá'vín) *n.* [L. *flavus* yellow.]  
A water-sol bl yellow pigment of  
cells leucochrome.

**flavoxanthi** (flá'vó'zán'thí) *n.* [L.  
*flavus* yellow *Gk. xanthos*  
yellow.] A yellow colouring matter  
in petals as of Ranunculaceae  
 $C_{20}H_{28}O_6$ .

**flex** (fléks) [L. *flexere* to bend.]  
To bend *appl* movements of  
limbs.

**flexor** (flék'sór) *n.* [L. *flexus* bent.]  
A muscle which bend a limb, or  
part by its contraction.

**flexor plate**—a median plat sup-  
porting protractor of insects, for  
attachment of tendon of law  
flexor

**flexus** (flĕk'sŭs) *n.* [*L. flexus* bent.] Curving in zigzag manner flexures.

**flexure** (flĕk'sŭr) *n.* [*L. flexus* bent.] A curve or bend *appl.* curve in embryonic brain, curve of intestine.

**float** (flōt) *n.* [*A.S. flotan* to float.] The pneumatophore of siphonophores one of four tracheal sacs in aquatic larva of Cnididae; large spongy mass serving as float in some pteridophytes.

**floating ribs**,—ribs not uniting at their ventral end with the sternum.

**floccose** (flōk'sŭs) *a.* [*L. floccus* lock of wool.] Covered with wool-like tufts *appl.* bacterial growth.

**floccular** (flōk'sŭlār) *a.* [*L. floccus* lock of wool.] Pert. the flocculus.

**flocculance** (flōk'sŭlāns) *n.* [*L. floccus* lock of wool.] Adhesion in small flakes, as of precipitate.

**flocculent** (flōk'sŭlĕnt) *a.* [*L. floccus* lock of wool.] Covered with soft waxy substance giving appearance of wool covered with small woolly tufts.

**flocculus** (flōk'sŭlŭs) *n.* [*L. L. dim. of L. floccus* lock of wool.] A small accessory lobe on each lateral lobe of the cerebellum posterior hairy tuft in some Hymenoptera.

**floccus** (flōk'sŭs) *n.* [*L. floccus* lock of wool.] The tuft of hair terminating tail downy plumage of young birds mass of cyphal filaments in algae and fungi.

**flora** (flōrā) *n.* [*L. flōs* flower] The plants peculiar to country area, or period.

**floral** (flō'rāl) *n.* [*L. flōs* flower] Pert. the flora of country or area *part.* flowers.

**florescence** (flōrĕ'sĕns) *n.* [*L. florescere* to beg. to flower] Bursting into bloom.

**floret** (flōrĕt) *n.* [*L. flōs* flower] One of the small individual flowers of composite flower flower with lemma and palea, of grasses.

**floricorn** (flō'rĭkōrn) *n.* [*L. flōs* flower *cornu*, hair] A form of branched hexamer pincule

**florigen** (flō'rĭjĕn) *n.* [*L. flōs* flower; *gignere* to produce.] A plant substance which stimulates change in buds to flowering condition flower ing hormone.

**florigenic** (flō'rĭjĕn'ĭk) *a.* [*L. flōs* flower *gignere* to produce.] *Appl.* principal originating in leaves which stimulates flowering.

**florula** (flō'rŭlā) *n.* [*Dim. of flōs.*] Plant population of a small unit area, as of compost heap etc.

**florescell** (flōrĕs') *n.* [*L. flocculus* little flower] Flower-like structure round the mouth, composed of five bourelets and five phyllodes, in some echinoids.

**florescens** (flōr'skĕns) *n.* [*L. flocculus* little flower] A small flower floret, *q. s.*

**floss** (flōs) *n.* [*O F flos* down.] A downy silky substance the loose pieces of silk in cocoon.

**flower** (flōw'ŕ) *n.* [*L. flōs* flower] The blossom of plant, comprising generally sepals, petals, stamens, and pistil leafy shoot adapted for reproductive purposes.

**flowering glum**—lemma, *q. s.*

**fluvial** (flōv'ŭl) *a.* [*L. fluvialis* *part.* river] Growing in or near streams inhabiting and developing in streams, *appl.* certain insect larvae caused by rivers, *appl.* deposits.

**fluvio-marine** (flōv'ŭmārĭn) *a.* [*L. fluvius* stream *mare* sea.] Pert. or inhabiting rivers and sea.

**fluvio-terrestrial** (flōv'ŭtĕrĕ's'trĭāl) *a.* [*L. fluvius* stream *terre* land.] Found in streams and in the land beside them.

**flux** (flŭks) *n.* [*L. flŭere* to flow] Term *appl.* species that are not yet stable.

**foetal** (fōtāl) *a.* [*L. foetus* offspring] Embryonic; *part.* foetus.

**foetid glands**,—small sac-like gland which secrete an ill-smelling fluid in Orthoptera.

**foetus** (fōtŭs) *n.* [*L. foetus* offspring.] An embryo in egg or in uterus.

- foliaceous** (fōlē shū) *a.* [*L. folium* leaf.] Having the form or texture of a foliage leaf—thin and leaf-like.
- Foliar process** [*C. Folio* or *Folius* Italian anatomist.] Anterior process of malleus—processus gracilis.
- foliar** (fōlē) *a.* [*L. folium* leaf.] *Part* = consisting of leaves.
- foliation** (fōlē shūn) *n.* [*L. folium* leaf.] The production of leaves leafing.
- folic** (fōlē) *a.* [*L. folium* leaf.] *Appl* acid obtained from spinach and liver extract  $C_2H_{12}O_8N_4$  and existing in various forms with haematopoietic and other effects *e.g.* vitamins  $B_6$   $B_{12}$ , M factors R and S rhizopterin etc.
- foliaceous** (fōlē shū) *a.* [*L. folium* leaf color to dwell.] Growing on leaves *appl* certain fungi and lichens.
- foliobranchiate** (fōlēbrāng'kiāt) *a.* [*L. folium* leaf *branchiae* gills.] Possessing leaf-like gills.
- foliolae** (fōlēōlē) *n. pl.* [*L. folium* stem leaf.] Leaf-like appendages of telum.
- foliolat** (fōlēōlē) *a.* [*L. folium* stem leaf.] *Part* having or like leaflets.
- foliol** (fōlēō) *n.* [*L. folium* stem leaf.] Small leaf-like organ or appendage a leaflet, as of compound leaf.
- foliose** (fōlēō) *a.* [*L. folium* leaf.] With many leaves leafy.
- folium** (fōlēōm) *n.* [*L. folium* leaf.] A flattened structure in the cerebellum, expanding laterally into superior semilunar lobules.
- folicle** (fōlēkl) *n.* [*L. folliculus* small sac.] A capsular fruit which opens on one side only—cavity or sheath an ovarian follicle a hair follicle.
- follicles** f Langerhans [*P. Langer* Amer. German anatomist]. Groups of cells in submucosa at junction of fore-gut and mid-gut of larval cyclostomes, secreting an insulin-like substance and being homologous to islets of Langerhans.
- follicle-stimulating hormone** — a

- gonadotrophic hormone prolactin which stimulates ovarian follicles and testis symbol FSH.
- follicular** (fōlēklār) folliculate (fōlēklāt) *a.* [*L. folliculus* small sac.] *Part*, like or consisting of follicles *appl.* an ovarian hormone.
- folliculose** (fōlēklōs) *a.* [*L. folliculus* small sac.] Having follicles.
- fontanelle** (fōntānel) *n.* [*F. fontanelle* little fountain.] A gap or space between bones in the cranium, closed only by membrane depression on head of termites.
- fonticulus** (fōntik'ulūs) *n.* [*L. fonticulus* dam of fount fountain.] A fontanelle depression at anterior end of sternum the jugular notch.
- food-chain**,—sequence of organisms in which each is food of a later member of the sequence.
- food vacuole**—a small vacuole containing food and food-particles, in endosome of many Protista.
- foot** (foot) *n.* [*A.S. fōt* foot.] An embryonic structure in vascular cryptogams through which nourishment is obtained from prothallus basal portion of sporophyt in mosses an organ of locomotion differing widely in different animals, from tube-foot of echinoderms, muscular foot of gastropods and other molluscs, tarsus of insects, to foot of vertebrates.
- foramen** (fōrām) *n.* [*L. foramen* opening.] The opening through coats of ovule any small perforation aperture through a bone or membranous structure.
- foramen (occipital)** magnum,—the opening in occipital region of skull through which passes the spinal cord.
- foramen of Monro** [*A. Monro* (primus) Scottish anatomist]. 1 ter ventricular foramen, passage between third and lateral ventricles; porta or foramen interventriculare
- foramina**,—*pl.* of foramen.
- foraminate** (fōrām'īnāt) *a.* [*L. foramen* opening.] Pitted having foramina or perforations.

foraminiferous (fôrâm'înf'êrûs) *a.* [*L. foramen* opening *ferr* to carry] Having foramina containing shells of Foraminifera.

forceps (fôr'sêps) *n.* [*L. forceps* tongs.] The chaper-shaped anal cercus of some insects large fighting or seizing claw of crabs and lobsters fibres of corpus callosum curving into frontal and occipital lobes.

forcipat (fôr'spât) *n.* [*L. forceps* tongs.] Resembling forceps or forked like forceps.

forcipulat (fôr'sp'ûlât) *n.* [*Dim. of L. forceps* tongs.] Shaped like small forceps *appl.* asteroid pedicellariae.

fore-brain,—prosencephalon. *q v*

forespore,—early stage in endospore formation, in bacteria.

fort *x* (fôr'tîcs) *n.* [*L. forfex* shears.] A pair of anal organs which open and shut transversely occurring in certain insects.

forticate (fôr'tîkâr) *a.* [*L. forfex* shears.] Deeply notched.

forma (fôr'mâ) *n.* [*L. forma*, shape.] Form taxonomic unit consisting of individuals that differ from those of larger unit by single character smallest category in botanical classification.

formation (fôr'mâ'shûn) [*L. forma*, shape.] Structure arising from an accumulation of deposits the vegetation proper to a definite type of habitat; production.

formative (fôr'mâtîv) *a.* [*L. forma*, shape.] Plastic *appl.* matter which is living and developable.

formicarian (fô'mîkâr'îân) *a.* [*L. formica*, ant.] *Part* ants *appl.* plants which attract ants by means of sweet secretions.

formicarium (fôr'mîkâr'îûm) *n.* [*L. formica*, ant.] Ants nest, particularly an artificial arrangement for purposes of study; formicary

fornicated (fôr'nîkâ'têd) *a.* [*L. fornicatus* vaulted.] Concave within, convex without arched.

fornix (fôr'nîks) *n.* [*L. fornix* vault.] A arched recess as be-

tween eyelid and eye-ball or between vagina and cervix uteri an arched sheet of white longitudinal fibres beneath corpus callosum; scutum of Cheilostomata one of arched scales in the orifice of some flowers.

fossa (fô'sâ) *n.* [*L. fossa*, ditch.] A pit or trench-like depression.

fosse (fô's) *n.* [*L. fossa*, ditch.] A fossa; circular groove formed by upper part of parapet in sea-anemones.

fossette (fô'sê't) *n.* [*F. fossa* small pit, from *L. fossa*, ditch.] A small pit; socket containing base of antennule in arthropods.

fossil (fô'sîl) *n.* [*L. fossilis* dug up.] Petrified animal or plant, or portion thereof as found in rocks.

fossiliferous (fôr'tîf'êrûs) *a.* [*L. fossilis* dug up *ferr* to carry] Containing fossils.

fossorial (fô'sôr'îâl) *n.* [*L. fossor* digger] Adapted for digging *appl.* animals, claws, feet.

foveal (fô'veâl) *n.* [*Dim. of L. fossa*, ditch.] A small fossa small pit with reduced septa on one side of corallite cup in Rugosa.

fossulate (fô've'ûlât) *a.* [*Dim. of L. fossa*, ditch.] With slight hollows or grooves.

fossulet (fô've'ûlê't) *n.* [*Dim. of L. fossa*, ditch.] A long narrow depression.

fourchette (fôorâbê't) *n.* [*F. fourchette* fork.] Frenulum of labia minora.

fovea (fô'veâ) *n.* [*L. fossa*, depression.] A small pit, fossa, or depression; small hollow at leaf base in Isoetes, containing sporangium pollinium base in rhizoids.

fovea centralis,—central and thinnest part of macula lutea, without rods and with long and slender cones.

fovea d'utula,—facet on atlas, for articulation with dens of axis.

foveal (fô've'ûl) *a.* [*L. fossa*, depression.] *Part* fovea; *part* fovea centralis *appl.* cone vision. *Opp.* extrafoveal.

- foveate** (fō fāi) *n* [L. *fovea* depression.] Pitted.
- foveola** (fōv'ōlā) *n* [L. *foveola* small depression.] A small pit a shallow cavity in bone a small depression just above fovea in leaf of Isoetes.
- foveolae opticae**—two pigmented areas in depressions of neural plate of amphibian embryo the primordia of eyes.
- foveolate** (fōv'ōlāt) *a* [L. *foveola* small depression.] Having regular small depressions.
- fragmentation** (frāg'mēntā'shūn) *n* [L. *frangere* to break.] Division into small portions nuclear division by simple splitting mitosis.
- fraternal**— dizygotic, *appl* twins.
- free** (frē) *a* [A.S. *free* acting to pleasure.] Motile unattached distinct separate
- f** central placentation,—axile placentation, fixation of ovules to central axis of ovary
- free-martin**—a sterile female twin-born with a male
- frenate** (frē'nāt) *a*. [L. *frenar* to bridle.] Having frenum or frenulum.
- frenulum** (frēn'ūlūm) *n* [L. *frenulum* dim. of *frenum* bridle.] A fold of membrane as of tongue clitoris, etc process on hind wing of Lepidoptera for attachment to fore-wing thickening of sub-umbrella of certain Scyphomedusae.
- frenum** (frē'nūm) *n*. [L. *frenum* bridle.] A frenulum a fold of integument at junction of mantle and body of Carripedia, ovigerous in Pedunculata also frenum.
- frigifuge** (frīg dīfū) *n*. [L. *friger* cold *fugere* to flee.] An organism which does not tolerate cold.
- frond** (frōnd) *n*. [L. *frons* leafy branch.] A leaf especially of fern or palm thallus of certain sea-weeds.
- frondescence** (frōndēs'ēns) *n*. [L. *frondescere* to put forth leaves.] Development of leaves.
- fons** (frōnz) *n* [L. *fons* fore-head.] Forehead or comparable structure.
- frontal** (frōn'tāl) *a*. [L. *fons* forehead.] In region of forehead *appl* artery vein lobe convolution; *appl* head-organ of nemertines prostomial ridge of polychaetes palps of certain nereids specialised feeding surface in certain ciliates ganglion, gland, and pore in insects.
- frontalis** (frōn'tā'lis) *n* [L. *fons* forehead.] Frontal part of the scalp muscle or epicranium.
- frontocerebellar fibres**—fibres passing from frontal region to cerebellum.
- frontoclypeus** (frōn'tōklīp'ēūs) *n*. [L. *fons* forehead *clipeus* shield.] Frons and clypeus fused, in insects.
- frontoethmoidal**—*part* frontal and ethmoidal bones *appl* suture.
- frontonasal** (frō'nōsāl) *a* [L. *fons* forehead *nasus* nose.] *Part* forehead or frontal region and nose *appl* ducts and process.
- frontosphenoidal** (frō'nōsfēnōidāl) *a*. [L. *fons* forehead *Gk* *sphēn* wedge *oides* form.] *Part* frontal and sphenoid bones *appl* process of zygomatic bone articulating with frontal.
- fructification** (frūk'tifīkā'shūn) *n*. [L. *fructus* fruit *facere* to make.] Fruit formation any spore-producing structure in cryptogams.
- fructose** (frūk'tūs) *n*. [L. *fructus* fruit.] Fruit-sugar laevulose  $C_6H_{12}O_6$ .
- frugivorous** (frōg'iv'ōrūs) *a*. [L. *frux* fruit *vorare* to devour.] Fruit-eating *appl* certain animals.
- fruit** (frūt) *n* [F. *fruits* from L. *fructus* fruit.] The fertilized and developed ovary of plant.
- fruit body**—the spore-bearing structure as sporangiocarp basidiocarp conidiocarp.
- fruit-spot**—*scorus*, as of ferns.
- frustal** (frūs'tāl) *n*. [L. *frustulum* small fragment.] The siliceous two-valved shell and protoplasm of diatom.

frutescent (froot'sh'nt) *a.* [L. *frutex* shrub.] Shrub-like fruticose.

frutax (froot'itka) *n.* [L. *frutax* shrub.] Shrub.

fruticose (froot'itkōs) *a.* [L. *frutex* shrub.] Like a shrub *appl.* certain lichens.

fruticulous (froot'itkōlōs) *a.* [L. *frutex* shrub.] Like a small shrub.

*f.* voracious (froot'vōrōs) *a.* [L. *vorax* seaweed *vorax* to devour] *Appl.* seaweed-eating animals.

furoid (fū'roid) [L. *fuus* seaweed Gk. *eides* form.] *Part* or resembling seaweed.

fucoan (fū'kōān) *n.* [L. *fuus* seaweed.] Product of carbon-assimilation in brown seaweeds.

*f.* coxanthin (fū'kōēn'thin) *n.* [L. *fuus* seaweed Gk. *stathos* yellow] The main carotenoid pigment of brown algae  $C_{40}H_{56}O_6$ .

fugacious (fūg'āshōs) [L. *fugax* wift.] Evasive falling off early caducous *appl.* petals, etc.

fuleral (fū'lēral) *a.* [L. *fulcrum* support.] *Part* or acting as fulcrum *appl.* triangular plates aiding in movement of tylets in Hymenoptera.

fulcrate (fū'lkrāt) *a.* [L. *fulcrum* support.] Having fulcrum.

fulcrum (fū'lkrūm) *a.* [L. *fulcrum* support.] A supporting organ such as a tendril or stipule sporophore in Bichens plate supporting ramul of incus in maxilla of rotifers the lower surface of a ligula a chitinous structure to base of insect rostrum hinge-line of brachiolepis spine-like scale on anterior fin-rays of many ganoids.

function (fūng'kshūn) *n.* [L. *functus* performed.] The action proper to any organ or part.

functional (fūng'kshūnāl) *a.* [L. *functus* performed.] Acting normally acting or working part of an organ as distinct from remainder

fundament,—primordium, *g.s.*

fundament,—hypocotyl, *g.s.*

fundatrix (fūn'dātriks) *n.* [L. *fundare* to found.] Stem mother a female founding new colony by oviposition *appl.* Aphides.

fundiform (fūn'difōrm) *a.* [L. *fundus*, sling *forme* shape.] Looped *appl.* a ligament of penis.

fundus (fūn'dōs) *a.* [L. *fundus* bottom.] The base of an organ as of stomach urinary bladder etc. boundary between underground and above-ground portions of plant axis.

fungicolous (fūng'ikōlōs) *a.* [L. *fungus* mushroom; *colere* to inhabit.] Living in or on fungi.

fungiform (fūng'ifōrm) [L. *fungus* mushroom *forme* shape.] Fungoid or shaped like a fungus *appl.* tongue papillae.

fungine (fūng'in) *n.* [L. *fungus* mushroom.] Chitinous substance forming cell-wall of fungi.

fungistati (fūng'istat'ik) *a.* [L. *fungus* mushroom Gk. *stathos* causing to stand.] Inhibiting the development of fungi.

fungivorous (fūng'ivōrōs) *a.* [L. *fungus* mushroom *vorax* to devour] *Appl.* fungus-eating animals and plants.

fungous (fūng'gōs) *a.* [L. *fungus* mushroom.] With character or consistency of fungus fungoid.

funicl (fū'nīkl) *n.* [L. *funiculus* small cord.] A ovule stalk slender strand attaching peridiole to peridium a small cord or band, as of nerve fibres large double strand of cells passing from aboral end of coelom to aboral wall of zoecium of Molluscoides also funiculus.

funicular (fūng'ikūlār) *a.* [L. *funiculus* small cord.] Consisting of a small cord or band *part.* a funiculus or funicle.

funiculus (fūng'ikūlōs) *n.* [L. *funiculus* small cord.] A funicle, *g.s.* one of the ventral, lateral, and dorsal columns of white matter of the spinal cord.



funnel (fún'əl) *n* [1 *funders* to pour] Siphon of cephalopods.

funneliform (fú 'əl'fórm) *a* [L. *fun* *ders* to pour *forma* shape.] Widening gradually from a narrow base infundibuliform

furca (fú'ká) *n*. [L. *furca* fork.] The apophysis or entothorax of insect metathorax forked intercoxal plate as in Copepoda.

furcal (fú'ká) *a* [L. *furca* fork] Forked *appl* a branchingerve of lumbar plexus.

furcaternum (fú'kástér'núrn) *n* [L. *furca* fork *sternum* breast bone] Forked poststernite or sternellum in many insects.

furcate (fú'ká) *a*. [L. *furca*, fork.] Branching like prongs of fork.

furciferous (fú'sí'f'érús) *a* [L. *furca*, fork *ferr* to carry] Bearing a forked ppendage as some insects.

furcula (fú'kúla) *n* [L. *furcula* dim of *furca*, fork.] A forked process or structure the merry thought bone a transverse ridge in embryonic pharynx partially fused abdominal ppendages forming springing organ in Collembola.

furred (fúrd) *a* [M.E. *forren* sheath.] Having short decumbent hairs thickly covering the surface.

fuscin (fús'ín) *n* [L. *fuscus* tawny] A brown pigment in retinal epithelium.

fusoid (fú'z) *n* [F. *fusum* from L. *fusus* spindle.] A spindle-shaped structure a spindle-shaped, thick walled spore divided by septa, in certain fungi *appl* fusiform macroconidium.

fusi (fú'z) *n*. *pl*. [L. *fusus* spindle] 1 spiders, organs composed of two retractile processes which issue from mamula and form threads.

fusiform (fú'z'í'fórm) *a*. [L. *fusus* spindle *forma* shape.] Spindle-shaped tapering gradually at both ends *appl* innermost layer of cerebral cortex *appl* a gyrus of temporal lobe.

fusion-nucleus, —central nucleus of embryo-mac formed by fusion of odd nuclei from each end.

galulae (gá'lúle) *n* *pl*. [Dim. of L. *fusus* spindle.] Spoon minute tubes of spinneret.

## G

galactase (gá'lák'tás) *n* [Gk. *gala*, milk.] An enzyme trypsin-like in action found in milk

galactin (gá'lák'tín) *n*. [Gk. *gala* milk.] The preputillary lactogenic hormone, prolactin; a polypeptide occurring in certain plants, e.g. in lupin.

galactoblast (gá'lák'tóblast) *n*. [Gk. *gala*, milk *blastos* bud.] A fat containing globule or colostrum corpuscle in mammary acini.

galactophorous (gá'lák'tó'fórus) *n*. [Gk. *gala* milk *phorós* to carry] Lactiferous *appl* ducts of mammary glands.

galactosis (gá'lák'tó'sis) *n*. [Gk. *gala* milk.] Milk secretion.

galactotropic (gá'lák'tótróp'ík) *a*. [Gk. *gala* milk *trope* turn.] Stimulating milk secretion *appl* hormone prolactin *q.v.*

galbulus (gá'l'búlus) *n* [L. *galbulus* cypressum ut.] A modified cone with fleshy scales, as in cypress

gal (gá'l) *n*. [L. *galus* helmet.] A helmet-shaped petal or other similarly-shaped structure epicranial posturosis, the galea aponeurotica, of the scalp muscle or occipitofrontalis galea capitis, thin sheath covering head of spermatozoon outer division of stipes or endopodite of first maxilla of insects itself divided into basigalea and distigalea prominence of movable digit of chelerae in Pseudoscorpionea.

galeate (gá'l'ái) *a* [L. *galus*, helmet.] Helmet-shaped hooded Galea, veins of [Galen Greek physician]. Internal cerebral veins and great cerebral vein formed by their union.

gall (gál) *n* [A.S. *gallia*, gall.] Bile secretion of liver [L. *galla*, gallnut.] An excrescence on plants, caused by fungi, mites, and insects,

especially by Cynipidae and Ceratomyidae.

gall bladder — pear shaped or spherical sac which stores bile.

galloxanthin (gál'òsàn'θín) *n.* [*L. gallos* cock *Gk. xanthos* yellow]

Carotenoid pigment associated with retinal cones in domestic fowl.

galvanotaxis (gál'vándítik'sis) *gal*

vanotropism (gál'vándót'ròptím) *n.* [*L. Galvani*, Italian physiologist]

Response or reaction to electrical stimulus.

gamete (gám'et) [*Gk. gametes* spouse.] *Part* a gamete reproductive.

gametangium (gám'etán'jóm) *n.* [*Gk. gametes* spouse *ovgion* vessel.] A structure producing sexual cells.

gametes (gám'et) *n. pl.* [*Gk. gametes* spouse.] Cells derived from gametocytes which conjugate and form zygotes; sexual cells.

gamet (gám'et) *a.* [*Gk. gametes* spouse.] *Part* gamete *appl* a mutation occurring before maturation of gametes *appl* link *gr.*

gametids (gám'et'ids) *n. pl.* [*Gk. gametes* spouse.] Primary sporoblasts destined to become gametes.

gametoblast (gám'et'òblást) *n.* [*Gk. gametes* spouse *blastos* bud]

Plasmon formulative substance.

gametocyst (gám'et'òsíst) *n.* [*Gk. gametes* spouse *kystis* bladder]

Cyst surrounding two associated free forms in sexual reproduction ofregarines.

gametocyte (gám'et'òsét) [*Gk. gametes* spouse *kystis* hollow]

The mother-cell of a gamete.

gametogenesis (gám'et'òjén'òsés) *n.* [*Gk. gametes* spouse; *genesis* origin.] Gamete formation gametogony

gametogamic (gám'et'òjén'ík) [*Gk. gametes* spouse *gamos* descent.]

Arising from spontaneous changes in chromosomes of gametes *appl* variation.

gametogonium (gám'et'òjón'ím) *n.* [*Gk. gametes* spouse, *gonos* off spring]

A cell producing a gamete a gametocyte.

gametoid (gám'et'òid) *n.* [*Gk. gametes* spouse *eidos* form.] A structure behaving like a gamete as apocytes uniting to form zygotoid.

gametokinesis (gám'et'òkínés'is) *a.* [*Gk. gametes* spouse *kinesis* to move.] Stimulating gamete formation *appl* hormones, as follicle-stimulating hormone or prolan A.

gametophore (gám'et'òfór) *n.* [*Gk. gametes* spouse; *phoros* to bear.] A special part of gametophyte on which gametangia are borne; a byphal outgrowth which fuses with a similar neighbouring outgrowth to form a zygospore.

gametophyll (gám'et'òfíl) *n.* [*Gk. gametes* spouse *phylon* leaf.] A modified leaf bearing sexual organs a micro- or macro-sporophyll.

gametophyte (gám'et'òfít) *n.* [*Gk. gametes* spouse *phyton*, plant.] The gamete-forming phase in the life of plant generations haplophase sexual generation of plants; pollen grain and embryo-sac of sporophyte.

gamete (gám'et) [*Gk. gametes* spouse.] *Part* gamete *appl* a mutation occurring before maturation of gametes *appl* link *gr.*

gametids (gám'et'ids) *n. pl.* [*Gk. gametes* spouse.] Primary sporoblasts destined to become gametes.

gametoblast (gám'et'òblást) *n.* [*Gk. gametes* spouse *blastos* bud]

Plasmon formulative substance.

gametocyst (gám'et'òsíst) *n.* [*Gk. gametes* spouse *kystis* bladder]

Cyst surrounding two associated free forms in sexual reproduction ofregarines.

gametocyte (gám'et'òsét) [*Gk. gametes* spouse *kystis* hollow]

The mother-cell of a gamete.

gametogenesis (gám'et'òjén'òsés) *n.* [*Gk. gametes* spouse; *genesis* origin.] Gamete formation gametogony

gametogamic (gám'et'òjén'ík) [*Gk. gametes* spouse *gamos* descent.]

Arising from spontaneous changes in chromosomes of gametes *appl* variation.

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A cell producing a gamete a gametocyte.

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gametogamic (gám'et'òjén'ík) [*Gk. gametes* spouse *gamos* descent.]

Arising from spontaneous changes in chromosomes of gametes *appl* variation.

- gamogastrous** (gām'ōgās'trōs) *n.* [Gk. *gamos* marriage *gaster* belly] *Appl* a pestil formed by union of ovaries, but with styles and stigmata free.
- gamogenesis** (gām'ōjēn ēsis) *n.* [Gk. *gamos* marriage *genesis* descent.] Sexual reproduction.
- gamogenetic** (gām'ōjēnēt'ik) *n.* [Gk. *gamos* marriage *genesis* descent.] Sexual reproduced from union of sex elements.
- gamogony** (gāmōg'ōni) *n.* [Gk. *gamos* marriage *gon* descent.] Sporogony in protozoa.
- gamont** (gāmōnt') *n.* [Gk. *gamos* marriage *on* being.] A sporont.
- gamopetalous** (gām'ōpēt'alōs) *n.* [Gk. *gamos* marriage *petalon* petal.] With coherent petals sym petalous.
- gamophase** (gām'ōfās) *n.* [Gk. *gamos* marriage *phasis* aspect.] The haploid phase of a life-cycle haptophase of zytophase.
- gamophyllous** (gām'ōfil'ōs) *n.* [Gk. *gamos* marriage *phyllon* leaf.] With sited perianth leaves monophyllous.
- gamosepalous** (gām'ōsep'alōs) *n.* [Gk. *gamos* marriage *sepal* sepal.] With coherent sepals monosepalous.
- gamostel** (gām'ōstēl') *n.* [Gk. *gamos* marriage *stēl* pillar.] Stele formed from fusion of several steles.
- gamostell** (gām'ōstēl'ik) *n.* [Gk. *gamos* marriage *stēl* pillar] *Appl* condition in which steles of polystelic stem are fused together.
- gamostely** (gām'ōstēl'i) *n.* [Gk. *gamos* marriage *stēl* pillar] The arrangement of polystelic stems when the separate steles are fused together surrounded by pericycle and endodermis.
- gamotropism** (gāmōt'rōpizm) *n.* [Gk. *gamos* union *tropē* turn.] Tendency to mutual attraction exhibited by movements of gametes.
- ganglia**.—*Pl* of ganglion.
- gangliar** (gāng'gilār) *n.* [Gk. *gangelion* little tumour] *Part* ganglion or ganglia.
- ganglitate** (gāng'gilīt) *n.* [Gk. *gangelion* little tumour] Having ganglia.
- gangliform** (gāng'gilōrm) *n.* [Gk. *gangelion* little tumour; *L. forma* shape.] In the form of a ganglion.
- ganglioblast** (gāng'gilōblāst) *n.* [Gk. *gangelion* little tumour *blastos* bud.] Mother-cell of gangliocyte.
- gangliocyte** (gāng'gilōsh) *n.* [Gk. *gangelion* little tumour *kytos* hollow] A ganglion cell outside the central nervous system.
- ganglioid** (gāng'gilōid) *n.* [Gk. *gangelion* little tumour *eidos* form.] Like a ganglion.
- ganglion** (gāng'gilōn) *n.* [Gk. *gangelion* little tumour] A mass of nerve cell bodies not giving origin to nerve fibres a nerve centre.
- ganglionated** (gāng'gilōnātēd) *n.* [Gk. *gangelion* little tumour] Supplied with ganglia gangliate.
- ganglioneural** (gāng'gilōnū'rāl) *n.* [Gk. *gangelion* little tumour *neuron* nerve] *Appl* system of nerves consisting of a series of ganglia connected by nerve strands.
- ganglioneuron** (gāng'gilōnū'rōn) *n.* [Gk. *gangelion* little tumour *neuron* nerve] A nerve cell of ganglion.
- ganglionic** (gāng'gilōn'ik) *n.* [Gk. *gangelion* little tumour] *Part*, consisting of or in neighbourhood of ganglion *appl* layer of retina, arteries, arterial system of brain.
- ganglioplexus** (gāng'gilōplēk'rōs) *n.* [Gk. *gangelion* little tumour *L. plexus* braided] A diffuse ganglion.
- ganoblast** (gān'ōblāst) *n.* [Gk. *gamos* sheen *blastos* bud.] An ameloblast.
- ganoid** (gān'ōid) *n.* [Gk. *gamos* sheen *eidos* form.] *Appl* scales of ganoid fishes, rhomboidal joined like parquetry and consisting of layer of bone with superficial enamel.
- ganoline** (gān'ōin) *n.* [Gk. *gamos* sheen.] The outer layer of ganoid scale formed by the corium enamel-like substance in formation of ameloblasts ganoin.

**gape** (gāp) *n.* [A.S. *gapan* to open wide.] The distance between the open jaws of birds, fishes, etc.

**garland cells**,—a chain of nephrocytes, in Diptera.

**gas gland**,—glandular portion of air bladder of fishes.

**Gasserian ganglion** [*A. P. Gasser* German anatomist]. The semilunar ganglion on sensory root of fifth cranial nerve.

**gastro**—*also* **gastro**—

**gasteromycetous** (gās'tērōmīcēt'ūs) *a.* [Gk. *gaster* stomach *mykes* mushroom.] Having the spores developed in gleba within peridium.

**gastraea** (gāstrē'ā) *n.* [Gk. *gaster* stomach.] A hypothetical gastrula-like animal the ancestral metazoan, according to Haeckel.

**gastraeum** (gāstrē'ūm) *n.* [Gk. *gaster* stomach.] Ventral side of body.

**gastral** (gās'trāl) *a.* [Gk. *gaster* stomach.] *Peri* stomach, as gastral cavity, cortex, layer etc.

**gastralla** (gāstrā'llā) *n. pl.* [Gk. *gaster* stomach.] Microclerites in the gastral membranes of Hexactinellida abdominal ribs, as in some reptiles.

**gastric** (gās'trīk) *a.* [Gk. *gaster* stomach.] *Peri*. or in region of stomach *appl.* arteries glands, nerves, veins.

**gastrin** (gās'trīn) *n.* [Gk. *gaster* stomach.] A hormone secreted by pyloric mucosa and which stimulates gastric secretion.

**gastro**—*also* **gastro**—**gastrocentrous** (gās'trōcēn'trūs) *a.* [Gk. *gaster* stomach *kentron* centre.] *Appl.* vertebrae with centra formed by pairs of later ventralia, while the basiventralia are reduced.

**gastrocnemius** (gās'trōknēm'īūs) *n.* [Gk. *gaster* stomach *cnemis* tibia.] Large muscle of calf of leg.

**gastrocoel** (gās'trōcēl) *n.* [Gk. *gaster* stomach *koelia* hollow.] The archenteron of gastrula.

**gastrocolle** (gās'trōkōl'ēk) *a.* [Gk. *gaster* stomach; *kolon* gut.] *Peri* stomach and colon; *appl.* ligament, the greater omentum.

**gastrocutaneous** (gās'trōkūtē'ūs) *a.* [Gk. *gaster* stomach *L. cutis* skin.] *Appl.* pores leading from intestine to surface in Hemichorda.

**gastrocystis** (gās'trōcīs'tīs) *n.* [Gk. *gaster* stomach *kystis* bladder.] Blastocyst.

**gastrodermis** (gās'trōdēr'mīs) *n.* [Gk. *gaster* stomach *derma* skin.] Enteroblast.

**gastroduodenal** (gās'trōdūōdē'nāl) *a.* [Gk. *gaster* stomach *L. duodeni* twelve each.] *Peri* stomach and duodenum *appl.* an artery.

**gastroepiploic** (gās'trōpīplō'ēk) *a.* [Gk. *gaster* stomach; *epiploon* omentum.] *Peri* stomach and great omentum *appl.* arteries, veins.

**gastrointestinal** (gās'trōintēstī'nāl) *a.* [Gk. *gaster* stomach *L. intus* within.] *Peri* stomach and intestines.

**gastrolleal** (gās'trōllē'nāl) *a.* [Gk. *gaster* stomach *L. liro* spleen.] *Peri* stomach and spleen *appl.* ligament gastrosplenic.

**gastrolith** (gās'trōlīth) *n.* [Gk. *gaster* stomach *lithos* stone.] A mass of calcareous matter found on each side of gizzard of crustaceans before mouth.

**gastroparietal** (gās'trōpār'ētiāl) *a.* [Gk. *gaster* stomach *L. paries* wall.] *Peri* stomach and body wall.

**gastr phrenic** (gās'trōfrēn'ēk) *a.* [Gk. *gaster* stomach *phren*, midriff.] *Peri* stomach and diaphragm *appl.* ligament.

**gastropod** (gās'trōpōd) *n.* [Gk. *gaster* stomach *pous* foot.] A mollusc with ventral muscular disc adapted for creeping gastropod.

**gastropores** (gās'trōpōrē) *n. pl.* [Gk. *gaster* stomach *poros* pores.] The larger pores, for nutrient persons, of hydroid corals.

**gastropulmonary** (gās'trōpūl'mōnārē) *a.* [Gk. *gaster* stomach *L. pulmo*, lung.] *Peri* stomach and lungs.

**gastropl nlc** (gās'trōplēn'lk) *n.* [Gk. *gaster* stomach *splēn* spleen.] *Peri* stomach and spleen gastroplenal.

**gastrostoge** (gās'trōstē) *n.* [Gk. *gaster* stomach *stoge* roof.] A ventral scale of snakes.

**gastrovascular** (gās'trōvās'kūlār) *n.* [Gk. *gaster* stomach *L. vasculum* small vessel.] Serving both digestive and circulatory purposes, as canals of some Coelentera.

**gastrozoid** (gās'trōzō'id) *n.* [Gk. *gaster* stomach *zōon* animal *zōid* form.] I coelenterate colonies, the nutrient person with mouth and tentacles trophozoid in some tunicates.

**gastrula** (gās'trōol) *n.* [Gk. *gaster* stomach.] The cup- or basin-shaped structure formed by invagination of a blastula.

**gastrulation** (gās'trōol'āshūn) *n.* [Gk. *gaster* stomach.] Formation of gastrula from blastula by invagination.

**geitonogamy** (gē'tōnōg'ām) *n.* [Gk. *geiton* neighbour *gamos* marriage.] Fertilisation of a flower by another from the same plant.

**gelatige us** (jē'lātij'ēūs) *n.* [L. *gelidus* to congeal Gk. *gēlos* producing] Gelatine producing

**gelatine** (jē'lātīn) *n.* [L. *gelidus* to congeal.] A jelly like substance obtained from animal tissue.

**gelatinous** (jē'lātīnūs) *n.* [L. *gelidus* to congeal.] Jelly-like in consistency

**geminate** (jēm'nāt) *n.* [L. *gemini* twins.] Growing in pairs binat paired *appt* species or subspecies corresponding forms in corresponding but separate regions as reindeer and caribou.

**gemini** (jēm'nī) *n. pl.* [L. *geminus* twins.] Bivalent chromosomes pairs of paternal and maternal chromosomes at parasyndesis

**geminiflorous** (jēm'nīfō'rūs) *n.* [L. *gemini* twins *flor* flower] *Appt* a plant whose flowers are arranged in pairs.

**gemma** (jēm'nā) *n.* [L. *gemma* bud.] A bud or outgrowth of a plant

or animal which develops into a new organism a leaf bud *appt* flower bud; a chlamydozooite, *q.s.* a hypothetical unit, *q.s.*

**gemmaeous** (jēm'nā'shūs) *n.* [L. *gemma*, bud.] *Peri* gemmae or buds.

**gemma-cup** —*cyathus*, *q.s.*

**gemmae** (jēm'nā) *n.* [L. *gemma* to bud.] Having buds.

**gemination** (jēm'nā'shūn) *n.* [L. *gemma* bud.] Budding bud-formation by means of which new independent individuals are developed in plants and animals arrangement of buds.

**gemmiferous** (jēm'nīf'rūs) *n.* [L. *gemma*, bud *ferre* to bear] Bud-bearing gemmate.

**gemmiform** (jēm'nīf'orm) *n.* [L. *gemma*, bud *forma*, shape] Shaped like bud *appt* pedicellariae of echinoderms.

**gemmiparous** (jēm'nīp'ārūs) *n.* [L. *gemma* bud *parere* to produce.] Reproducing by bud-formation.

**gemmulation** (jēm'nīl'āshūn) *n.* [L. *gemmaula*, little bud.] Gemmule-formation.

**gemmule** (jēm'nīl) *n.* [L. *gemmaula*, little bud.] A pangen a moss bud one of the internal buds of Porifera arising asexually and coming into activity on death of parent organism one of the minute protoplasmic processes on branch of a dendrite, contact point in synapse.

**gena** (jē'nā) *n.* [L. *gena* cheek.] The cheek or side part of head antero-lateral part of proscutum of trilobites, and insect head.

**genal** (jē'nāl) *n.* [L. *gena* cheek.] *Peri* the cheek *appt* facial suture of trilobites and angle of cheek.

**gene** (jēn) *n.* [Gk. *gēnē* descent.] A unit hereditary factor in the chromosome also *gen* regarded as multiple composed of genomers.

**gene flow**,—the spreading of genes resulting from outcrossing and from subsequent crossing within group *genorhethrum* *q.s.*

**gene mutation**,—a heritable variation caused by changes at particular locus point mutation.

**genecology** (jén'kól'óŋ) *n.* [Gk. *gennas* descent; *oikos* household *logos* discourse.] Ecology in relation to genetics.

**Gené's organ** [C G (*and* Italian zoologist)] Subcutal or cephalic gland secreting a viscid substance used in transferring eggs to dorsal surface in ticks.

**geneogenous** (jén'ô'ôŋ) *a.* [Gk. *gennas*, birth *gennesis*, to produce.] Congenital.

**geneology** (jén'ô'ôŋ) *n.* [Gk. *gennas* descent *logos* discourse.] The study of development of individual and race embryology and paleontology combined.

**genera**,—*Plur.* of genus.

**generalised** (jén'eral'iz'd) *a.* [L. *generalis* of one kind.] Combining characteristics of two or more groups, as in many fossils.

**generation** (jén'êr'êŋ) *n.* [L. *generatio* reproduction.] Production; formation; the individuals of species equally remote from common ancestor.

**generative** (jén'êŋ'itiv) *a.* [L. *gignere*, to beget.] Concerned in reproduction *appl.* smaller of two cells into which pollen grain primarily divides.

**generative ferment**,—a specific substance present in small quantities in blood necessary for formation of gonadial internal secretions.

**generic** (jén'êr'ik) *a.* [L. *gignis* race.] Common to all species of genus *part.* genus.

**generitype** (jén'êr'itip) *n.* [L. *gignis* race *typus* image.] The typical species of genus.

**genesiology** (jén'êŋ'ô'ôŋ) *n.* [Gk. *gennas* descent *logos* discourse.] Science dealing with reproduction.

**genesis** (jén'êŋ) *n.* [Gk. *gennesis* descent.] Formation production or development of a cell organ, individual or species.

**geneti** (jén'êŋ'ik) *a.* [Gk. *gennas* descent.] *Part.* *gennesis* *part.* genetics.

**ge ti factor**—*gene g.v*

**geneti spiral**,—in spiral phyllotaxis, imaginary spiral line following points of insertion of successive leaves.

**genetics** (jén'êŋ'iks) *n.* [Gk. *gennas* descent.] That part of biology dealing with heredity and variation.

**genotype**—*genotype.*

**genial** (jén'ial) *a.* [Gk. *gennaios* chin.] *Part.* the chin *appl.* chin plates of reptiles *appl.* tubercles on inside of mandible for insertion of genoglossal and geniobryoid muscles.

**geni** (jén'ik) *a.* [Gk. *gennas* descent.] *Part.* *gennas*.

**geni balance**,—harmonious interaction of genes.

**genicular** (jén'ik'ulâr) *a.* [L. *genua* *how* little knee.] *Part.* region of the knee *appl.* arteries etc. *part.* geniculum.

**genionate** (jén'ik'ulât) *n.* [L. *genua* *how* little knee.] Bent like knee-joint *appl.* antenna *part.* geniculum, *appl.* a ganglion of the facial nerve *appl.* bodies, lateral and rostral corpora geniculata, constituting the metathalamus having upper part of filament forming an angle more or less obtuse with lower.

**geniculum** (jén'ik'ulim) *a.* [L. *genua* *how*, little knee.] Sharp bend in nerve; part of the facial nerve in temporal bone where it turns abruptly towards stylo-mastoid foramen.

**genioglossal** (jén'ô'ôŋ'ô'ôl) *a.* [Gk. *gennaios* chin *glossa*, tongue.] Connecting chin and tongue; *appl.* muscle geniohyoglossal.

**geniobryoid** (jén'ô'ôld) *a.* [Gk. *gennaios*, chin, *bryoides* T-shaped.] *Part.* chin and bryoid *appl.* muscles.

**genital** (jén'tâl) *a.* [L. *gignere* to beget.] *Part.* the region of reproductive organs *appl.* corporacles glands, ridges, tubercles, etc.

**genitalia** (jén'tâl'm) *n. Plur.* [L. *gignere* to beget.] Genitals, the organs of reproduction especially the external organs.

- genito-anal (jén'noá nál) *n.* [*L. gignere* to beget *anus* vent.] In the region of genitalia and anus.
- genitocrural (jén'noá'kroo rál) *n.* [*L. gignere* to beget *crus* leg.] In the region of genitalia and thigh.
- ggnl* *n.* nerve originating from first and second lumbar nerves.
- genito-enteric (jén'noá'entér'ík) *n.* [*L. gignere* to beget *Gk. enteron* gut.] Pert genitalia and intestine.
- genitofemoral (jén'noá'fém'drá) *n.* [*L. gignere* to beget *femur* thigh-bone.] Genitocrural.
- Gennari's band [*F. Gennari* Italian anatomist] A layer of white fibres in middle cell-lamina of cerebral cortex, especially of occipital lobe line of Gennari.
- genoblast (jén'oblást) *n.* [*Gk. gennao* offspring *blastos* bud.] A mature germ-cell exclusively male or female.
- genoholotype (jén'oból'ótip) *n.* [*Gk. gennao* race *holos* whole *typos* image.] A species defined as typical of its genus.
- gen me (jén'me) *n.* [*Gk. gennao* offspring] Minimum group set of chromosomes derived from sygot or gamete gamete.
- gen mer (jén'mér) *n.* [*Gk. gennao* offspring *meros* part] A unit of gene regarded as multiple.
- genon m (jén'ón'ém) *n.* [*Gk. gennao* descent *nomos*, thread.] Actual thread on which genes are located in chromosome axoneme chromonema chromatid in its genetical aspect.
- genonomy (jén'ón'ómí) *n.* [*Gk. gennao* descent *nomos* law] The study of laws of relationships with reference to classification of organisms.
- genophenes (jén'oféná) *n. pl.* [*Gk. gennao* offspring *phaino* to appear] Reaction types of the same genotype.
- genorheithrum (jén'óer'thróm) *n.* [*Gk. gennao* descent *rhithron* stream.] The passage or descent of genes in phylogenesis.
- gen some (jén'sóm) *n.* [*Gk. gennao* descent *soma*, body] The part

- of the chromosome bearing the locus of a gene.
- genospecies (jén'ósép'ábés) *n.* [*Gk. gennao* race *L. species* particular kind.] A species consisting of individuals having the same genotype.
- genosynotype (jén'ósín'ítíp) *n.* [*Gk. gennao* race *syn* with *typos* image.] A series of species together defined as typical of their genus.
- genotype (jén'ótip) *n.* [*Gk. gennao* race *typos* image.] Genetic or factorial constitution of an individual group of individuals possessing the same genetic constitution biotype genoplast type species of a genus, genotype.
- genotypic (jén'ótip'ík) *n.* [*Gk. gennao* race *typos* image.] Pert genotype *ggnl* characters arising from hereditary endowment.
- genovariation,—point mutation *g n*
- gene (jén'ú) *n.* [*L. gennao* knee.] A knee-like bend in an organ or part anterior end of corpus callosum.
- genus (jén'ús) *n.* genera (jén'el) *pl.* [*L. gennao* race.] A group of closely related species, in classification of plants or animals.
- genys (jén'ú) *n.* [*Gk. gennao* jaw] Lower jaw
- geobionts (jén'óbíón'ts) *n. pl.* [*Gk. ge* earth *bios* living] Organisms permanently inhabiting the soil.
- geobios (jén'óbí'ós) *n.* [*Gk. ge* earth *bios* life.] Terrestrial life edaphon, *g n*
- geoblast (jén'óblást) *n.* [*Gk. ge* earth *blastos* bud.] A germinant in plumule of which the cotyledons remain underground.
- geocarpic (jén'ókár'pík) *n.* [*Gk. ge* earth *karpos* fruit.] Having the fruits maturing underground.
- geocryptophyt (jén'ókript'ófit) *n.* [*Gk. ge* earth *cryptos* hidden *phyton* plant.] A plant with dormant parts underground geophyte.
- geology (jén'ól'ójí) *n.* [*Gk. ge* earth *logos* discourse.] The science dealing with structure, activities, and history of the earth.

**geomallum** (jēōm'ālūm) *n.* [Gk. *ge* earth *mallos* level.] Response to the influence of gravitation horizontal habitus.

**geopastic** (jēōdās'tik) *n.* [Gk. *ge* earth; *paschos* pressed.] Curving towards the ground.

**geonemy** (jēōn'ēmī) *n.* [Gk. *ge* earth; *nemesis* to inhabit.] The geographical distribution of organisms biogeography chorology

**geophilous** (jēōf'īlūs) *n.* [Gk. *ge* earth *philein*, to love.] Living in or on the earth.

**geophyte** (jēōf'īt) *n.* [Gk. *ge* earth *phyton* plant.] A land plant plant with dormant parts (tubers, bulbs, rhizomes) underground.

**geosis** (jēō'sis) *n.* [Gk. *ge* earth *lisis* to put in row.] A series originating on clay substratum.

**geotaxis** (jēō'tāks'is) *n.* [Gk. *ge* earth *taxis* arrangement.] Locomotor response to gravity

**geotenus** (jēō'tēnūs) *n.* [Gk. *ge* earth *tenos* tension.] Normal position in relation to gravity

**geotropism** (jēō'trōp'izm) *n.* [Gk. *ge* earth *trope* turn.] Tendency to respond to stimulus of gravity usually positive, by turning downwards as in growth of root.

**gephyrocercal** (jēf'irōsēr'kāl, jēf'rōsēr'kāl) *n.* [Gk. *gephyra*, bridge *kērke* tail.] *Appl.* secondary diphyrcal caudal fin brought about by reduction of extreme tip of heterocercal or homocercal fin.

**geratology** (jēr'atol'ōjī) *n.* [Gk. *geras* old age *logos* discourse.] Study of the factors of decadence and old age of populations / gerontology

**germ** (jērm) *n.* [L. *germen*, bud.] A unicellular micro-organism seed bud developing egg

**germ band**,—primitive streak, of early embryo.

**germ-cell**,—a reproductive cell *egg* somatic cell; primitive male or female element.

**germ-centre**,—an area of lymph-corpuscle division in nodules of lymph gland tissue.

**germ-disc**,—a small green cellular plate of the germ tube of liverworts of germinal disc.

**germ-layer**,—an early differentiated layer of cells.

**germ nucleus**,—an egg or sperm nucleus.

**germ plasma**,—idioplasm the physical basis of inheritance.

**germ pore**,—the exit pore of germ tube in the spore integument.

**germ stock**,—stolon of tunicates.

**germ theory**,—biogenesis the theory that living organisms can be produced or developed only from living organisms.

**germ track**,—lineage of zygote; developing organism continuity of germ cells.

**germ tube**,—short filamentous tube put forth by germinating spore.

**germ vitellarium**,—an organ of platyhelminths producing both ova and vitelline material.

**germ yolk gland**,—in some Rhabdocoelids, an embryonic structure consisting of fertile portion of egg and sterile portion which functions as yolk gland feeding the fertile portion.

**germarium** (jērm'ārium) *n.* [L. *germen*, bud.] An ovary distal portion of an ovariole.

**germ** (jēr'mān) *n.* [L. *germen* bud.] A mass of undifferentiated cells, the primary form of germ cells.

**germiduct** (jēr'midlkt) *n.* [L. *germen*, bud; *ducere*, to lead.] Oviduct, of trematodes.

**germigen** (jēr'mīēn) *n.* [L. *germen* bud *generare* to beget.] Ovary of trematodes.

**germinal** (jēr'mīnāl) *n.* [L. *germen* bud.] Part seed, germ-cell or reproduction.

**germinal bands**,—two sets of rows of cells in early development of annulates.

**germinal cells**,—the cells concerned in reproduction, set apart early in embryonic life.

**germinal disc**,—the disc-like area of an egg yolk on which segmentation first appears blastodisc.



- germinal epithelium**,—the layer of columnar epithelial cells covering the stroma of an ovary
- germinal layers**,—primary layers of cells in a developing ovum epiblast hypoblast, and later mesoblast histogens, *q.v.*
- germinal lid**,—operculum of a pollen-grain.
- germinal spot**,—the nucleolus of an ovum
- germinal vesicle**,—the nucleus of an ovum before formation of polar bodies.
- germination** (jér'miná'shún) *n.* [*L. germin* bud.] Beginning of growth budding protect development.
- germination hormone**,—substance formed in endosperms of Gramineae and which stimulates growth of the coleoptile and inhibits that of the root blastanin
- germiparity** (jér'mipá 'lís) *n.* [*L. germin*, bud *parere* to beget.] Reproduction by germ-formation.
- germog** (jér'mójén) *n.* [*L. germin* bud *Gk. gennao* offspring.] The central cell of gastrula like phase or infusogen, a development of Rhombosoma the residual nucleus, or unused portion after formation of rhombogen by division of primary germogen or primitive central cell
- gerontal** (jér'ón'tál) *n.* [*Gk. geron* old man.] Scille
- gerontic** (jér'ón'tík) *n.* [*Gk. geron* old man.] *Pyris* old age gerontal *epith.* stage in phylogeny
- gerontology** (jér'ón'tol'ójí) *n.* [*Gk. geron* old man *logos* discourse.] The study of senescence and senility geratology *q.v.*
- gestalt** (géstált) [*Ger Gestalt* form.] Organized or unified response to an arrangement of stimuli co-ordinated movements or configuration of motor reactions a mental process considered as an organized pattern, involving explanation of parts in terms of the whole a pattern considered in relation to background or environment *epith.* morphology irrespective of taxonomic relationships.
- gestation** (jéstá'shún) *n.* [*L. gestare* to bear.] The intra-uterine period in development of an embryo.
- giant cells**,—large nerve-cells in annelids myeloplaxs osteoclasts, large multinuclear protoplasmic masses found in marrow spleen megakaryocytes, *q.v.* Langhans cells *q.v.* Betts cells, *q.v.* gigantocytes.
- giant chromosomes**,—polytene or large chromosomes, as in salivary gland cells of larval Diptera.
- giant fibres**,—greatly enlarged and modified nerve-fibres running longitudinally through ventral nerve cord of some invertebrates.
- gibbous** (gíb'ús) *a.* [*L. gibbus* hump.] Inflated saccate or poached as the lateral sepals of Cruciferae gibbose.
- gigantocyte** (jígán'tosh) *n.* [*Gk. gigas* giant *lytes* hollow.] Giant cell, *q.*
- gill** (gil) *n.* [*M.E. gille* gill.] A plate-like or filamentous outgrowth respiratory organ of aquatic animals radial lamella on under side of peltus of Agarica.
- gill arch**,—part of visceral skeleton in region of functional gills branchial ribs
- gill basket**,—the branchial skeleton of lampreys, composed of continuous cartilage.
- gill book**,—the respiratory organ of certain Palaeostraca consisting of large number of leaf-like structures between which water circulates.
- gill cleft**,—a branchial cleft formed on side of pharynx.
- gill cover**,—an operculum
- gill filix**,—a spirally coiled gill-like organ in certain Clupeida
- gill plume**,—the gill or ctenidium of the majority of Gasteropoda
- gill pouch**,—an oval pouch containing gills and communicating directly or indirectly with exterior as in Myxine and Petromyzon.
- gill rakers**,—small spine-like structures attached in a single or double row to branchial arches preventing escape of food.

**gill remnants**,—epithelial, post branchial or suprapericardial bodies arising in pharynx of higher vertebrates.

**gill rods**,—gelatinous rods supporting the pharynx in Cephalochorda branchial rays in certain fishes.

**gill slits**,—a series of perforations leading from pharynx to exterior persistent in lower vertebrates, embryonic in higher.

**gingival** (jīn'vāl) *n.* [*L. gingivae* gums.] *Part.* the gums.

**ginglymoid** (gīng'gīmōid) *n.* [*Gk. ginglymos* hinge joint; *oides* form.] Constructed like hinge-joint.

**ginglymus** (gīng'gīmūs) *n.* [*Gk. ginglymos* hinge-joint.] An articulation constructed to allow of motion in one plane only.

**Giraldès organ** [*J. A. C. C. Giraldès* Portuguese surgeon]. The para didyma.

**girdl** (gēr'dl) *n.* [*A.S. girdan* to gird.] In appendicular skeleton, the supporting structure at shoulder and hip each consisting typically of one dorsal and two ventral elements transverse groove in Dinoflagellata, containing transverse flagellum and separating epicone and hypocone the cingulum of diatoms.

**girdle bundles**,—leaf trace bundles which girdle the stem and converge at the leaf insertion, as in Cycadales.

**girdle scar**,—a series of scale scars on axis of bud.

**gito**—gēto-

**gizzard** (gī'zārd) *n.* [*M.E. gisar* gizzard.] Muscular grinding chamber of alimentary canal of various animals proventriculus of insects.

**glabella** (glā'bēlā) [*L. glaber* bald.] The space on forehead between superciliary ridges the elevated median region of cephalic shield of Trilobites.

**glabrat** (glā'brāt) *n.* [*L. glaber* smooth.] Becoming smooth glabrescent; with nearly smooth surface.

**glabrous** (glā'brūs) *n.* [*L. glaber*

smooth.] With a smooth, even surface.

**glacial** (glā'shāl) *n.* [*L. glacies* ice.] *Part* or *epoch* the Pleistocene epoch of the Quaternary period characterized by periodic glaciation.

**gladate** (glād'tāt) *n.* [*L. gladius* sword.] Shaped like a sword ensiform.

**gladiolus** (glād'iōlūs, glād'iō'lūs) *n.* [*L. gladiolus* small sword.] The mesosternum or corpus sterni.

**gladius** (glād'iūs) *n.* [*L. gladius* sword.] The pen or chitinous shell in Chondrophora of phragmocone siphon.

**glairine** (glā'rēn) *n.* [*F. glaire* white of egg.] Glairy film found on thermal springs and formed by peptic coagula.

**gland** (glānd) *n.* [*L. glanda* acorn.] Single cell or mass of cells specialized for elaboration of secretions either for use in the body or for excretion *glands*.

**gland cell**,—an isolated secreting cell of glandular epithelium.

**glandula** (glān dōlā) *n.* [*L. glandula*, small acorn.] A gland glutinous gland suberving cohesion of pollinia arachnoid granulation on outer surface of dura mater.

**glandula vesiculosa**,—seminal vesicle.

**glandulae Pacchionii**,—arachnoid cell granulations or Pacchionian bodies, *q.v.*

**glandular** (glān dōlār) *n.* [*L. glandula*, small acorn.] *Part.* gland with secreting function.

**glandular epithelium**,—the tissue of glands, composed of polyhedral columnar cubical cells whose protoplasm contains or elaborates the material to be secreted.

**glandular tissue**,—tissue of single or massed cells, parenchymatous and filled with granular protoplasm adapted for secretion of aromatic substances in plants.

**glandulose serrate** (glān dōlōsēr'tāt) *n.* [*L. glandula*, small acorn *serratus* sawn.] Having the serrations tipped with glands.

glands (glāns) *n.* [*L. glans* acorn]

A nut a hard, dry ind luscious one  
called fruit as an acorn a gland  
the glands penis the glands clitoridis.

Glaserian fissure [*/ H Glaser*  
Swiss anatomist]. Petrotympanic  
fissure.

glaucous (glōsēs ēn) *a.* [*L. glaucus*  
sea-green.] Somewhat glaucous.

glaucous (glōk ūs) *a.* [*L. glaucus*  
sea-green.] Bluish green covered  
with a pale green bloom.

glob (glōb) *n.* [*L. globus* clod]  
The central part of the sporophore  
in certain fungi the spore-forming  
apparatus in certain plants.

globula (glōbŭlā) *n.* [*L. globula*  
small clod.] A small prominence  
on a lichen thallus.

glenohum ral (glōnōhū mērl) *a.*  
[*Gk. glenē* socket *L. humerus*  
humerus.] Part. glenoid cavity and  
humerus *appl.* ligaments.

glenoid (glēnōid) *a.* [*Gk. glenē*  
socket *side* form.] Like a  
socket *appl.* cavity into which  
head of humerus fits the mandib-  
ular fossa, and various ligaments.

gl noidal labrum,—a fibro-cartilagi-  
nous rim attached round the margin  
of glenoid cavity and of acrobulum

glio (glō'ā, glō'ā) *n.* [*Gk. glia, glia*]  
Glia cells neuroglia cell a support-  
ing cell of nervous tissue.

gliadin (glō'adin) *n.* [*Gk. glia*  
glue] A substance interacting with  
glutens to form gli ten in cereals  
the prolamine of wheat and rye  
seeds formerly any prolamine.

gliding growth,—*see* sliding growth.

gliosomes (glō'sōmz) *n. pl.* [*Gk.*  
*glia* glue *soma* body] Granules  
in protoplasm of neuroglia, possibly  
in relation with mitochondria.

Gilson capsul [*F. Glisson*,  
English physician]. A fibrous  
capsule within liver enclosing hep-  
atic artery portal vein, lymphatic  
vessels, and bile duct.

globat (glō'bāt) *a.* [*L. globus*  
globe.] Globe-shaped globular

globigerina ooze —sea-bottom mud  
which is largely composed of shells  
of Foraminifera.

globin (glō'bīn) *n.* [*L. globus* globe]  
The basic protein constituent of  
haemoglobin.

globoid (glō'boid) *n.* [*L. globus*  
globe *Gk. side* form.] A  
spherical body in aleurone grains,  
double phosphate of calcium and  
magnesium.

globose (glō'bōs) *a.* [*L. globus*  
globe.] Spherical or globe-shaped  
globular

globule (glōb'ul) *n.* [*L. globulus*,  
small globe] Any minute spherical  
structure the antheridium of  
Characeae globules.

globulin (glōb'ulīn) *n.* [*L. globus*  
globe.] A protein, insoluble in  
water such as fibrinogen, vitellin,  
crystallin, legumin.

globulose (glōb'ulōs) *a.* [*L. globus*  
globe.] Spherical consisting of,  
or containing globules.

gl bulus (glōb'ulūs) *n.* [*L. globulus*  
small globe.] A globule spherical  
or club-shaped sensory organ at  
bifurcation of antenna in Puro-  
poda.

gl bus major and minor —head and  
tail of epididymis.

globus pallidus,—part of lentiform  
nucleus of corpus striatum.

glochidiate (glōk'id'it) *a.* [*Gk.*  
*glochis* arrow-point.] Furnished  
with barbed hairs.

glochidium (glōk'id'tīm) *n.* [*Gk.*  
*glochis* arrow-point *idion* stem.]  
Hairs bearing barbed processes  
seen on manulae of certain rhi-  
zo-carpa the larva of fresh-water  
mussels such as Unio and Anodon.

gloea (glō'ā) *n.* [*Gk. glōia, glia*] An  
adhesive secretion of some protozoa.

gloeocystidium (glō'kōstid'tīm) *n.*  
[*Gk. glōia* sticky *kystis* bag  
*idion* stem] A cystidium contain-  
ing slimy or oily substance.

gl mera carotica,—carotid bodies,  
*see*

glomerular (glōmēr'ulār) *a.* [*L.*  
*glomerus* ball.] Part or like a  
glomerulus

gl merulate (glōmēr'ulāt) *a.* [*L.*  
*glomerus* ball.] Arranged in  
clusters.

glomerul (glōm'ērl) *n.* [*L. glomerus* ball.] A condensed cyme of almost sessile flowers a compact cluster

glomeruliferous (glōm'ēr'flif'ērs) *a.* [*L. glomerus* ball *ferre* to carry] Having the flowers arranged in glomerules.

glomerulus (glōm'ēr'flūs) *n.* [*L. glomerus* ball.] Network of capillary blood-vessels. Inturned portion of a Bowman's capsul. oval body terminating olfactory fibres in rhinencephalon. mass of interlacing intracapsular dendrites, in sympathetic ganglia. glomerula.

glomus (glō'mūs) *n.* [*L. glomerus* ball.] A number of glomeruli run together. coxycyl and carotid bodies, consisting largely of chromaffin cells.

glossa (glō'sā) *n.* [*Gk. glossa*, tongue.] A tongue-like projection in middle of labium of insects.

glossal (glō'sāl) *a.* [*Gk. glossa*, tongue.] *Part.* the tongue.

glossarium (glō'sār'īum) *n.* [*Gk. glossa*, tongue.] The slender pointed glossa of certain Diptera.

glossate (glō's'it) *a.* [*Gk. glossa*, tongue.] Having tongue or tongue-like structure.

glossa-epiglottis (glō's'ēpiglō't'ik) *a.* [*Gk. glossa* tongue *epi* upon *glōtis*, tongue.] *Part.* tongue and epiglottis *appl.* folds of mucous membrane.

glossohyal (glō's'ōh'āl) *n.* [*Gk. glossa*, tongue *hyoides* T shaped.] Median buidhial of fishes entoglossum.

glossa-kinæsthetic area, —a brain area in Broca convolution immediately connected with speech.

glossopalatin (glō's'ōpāl'āfn) *n.* [*Gk. glossa*, tongue *L. palatus* palate.] Connecting tongue and soft palate *appl.* arch, muscle.

glossophagi (glō's'ōf'āfn) *a.* [*Gk. glossa*, tongue *phagere*, to eat.] Securing food by means of the tongue

glossopharyngeal (glō's'ōf'āfnj'āl) *n.* [*Gk. glossa*, tongue *pharynx*

gullet.] *Part.* pharynx and gullet *appl.* ninth cranial nerve

glossopod m (glō's'ōp'ō'diūm) *n.* [*Gk. glossa*, tongue; *pous* foot.] The sheathing leaf-base of Isotica.

glossotheca (glō's'ōth'ē'kā) *n.* [*Gk. glossa*, tongue *thēka* box.] The proboscis-covering part of pupal integument of insects.

glottis (glō't'is) *n.* [*Gk. glōtis*, tongue.] The opening into the windpipe.

glucose (glōok'ūs) *n.* [*Gk. glykys* sweet.] A plant enzyme which produces grape sugar from maltose.

glucokin (glōok'ōk'nin) *n.* [*Gk. glykys* sweet *kinein* to move.] A plant substance capable of reducing blood-sugar

glucoproteins, —see glycoproteins.

glucose (glōok'ūs) *n.* [*Gk. glykys* sweet.] The grape sugar of plants and animals dextrose,  $C_6H_{12}O_6$

glume (glōom'ā) *n.* [*L. gluma*, husk.] A bract at base of grass inflorescence or spikelet a chaffy or membranous bract glume.

glumaceous (glōom'ā'shūs) *a.* [*L. gluma*, husk.] Dry and scaly like glumes formed of glumes.

glume, —gluma, *g.s.* lemma, *g.s.*

glumiferous (glōom'if'ērs) *a.* [*L. gluma*, husk *ferre* to bear.] Bearing or producing glumes.

glumiflorous (glōom'iflō'rūs) *a.* [*L. gluma*, husk *flor* flower] Having flowers with glumes or bracts at their bases.

gluteal (glōot'ē'āl) *a.* [*Gk. gluteus* buttock.] *Part.* or in region of buttocks *appl.* arteries, muscles nerves, tuberosity veins.

gluteus (glōot'ē'ūs) *n.* [*Gk. gluteus* buttock.] A muscle of the buttock.

glutathion (glōot'āth'ōn) *n.* [*L. glutum* glu *Gk. thalon*, sulphur] A sulphur-containing tri-peptide found in different tissues and capable of being alternately reduced and oxidized  $C_{15}H_{27}O_6N_3S_2$ .

glute (glōot'ē'ūs) *n.* [*L. glutum* glue.] A nitrogenous substance obtainable from some cereals product of gliadin and glutenin.

**glutenin** (glót'én) *n* [*L. gluten* glue] A substance of cereals inter acting with gliadin to form gluten.

**glutinous** (glót'ínus) *a* [*L. gluten* glue.] Having a sticky or adhesive surface.

**glycerin** (glh'érin) **glycerol** (glh'éról) *n* [*Gk. glykys* sweet.] The sweet principle of natural fats and oils  $C_3H_8(OH)_3$ .

**glycogen** (glí'kójén) *n* [*Gk. glykys* sweet.] A carbohydrate storage product of plants and animals ( $C_6H_{12}O_6$ )<sub>n</sub> animal starch.

**glycogenase** (glí'kójénás) *n*. [*Gk. glykys* sweet *gnai* producing.] An enzyme which causes synthesis of storage glycogen in liver.

**glycolysis** (glí'kól'ízis) *n*. [*Gk. glykys* sweet *lysis* to loosen.] Decomposition of glucose or of glycogen, by hydrolysis.

**glycophyte** (glí'kófít) *n* [*Gk. glykys* sweet *phylon* plant.] A plant unable to thrive on substratum containing more than 0.5 per cent. sodium chloride in solution *opp. halophyte*.

**glycoproteins** (glí'kóp'rót'ínas) *n pl.* [*Gk. glykys* sweet *prote* first.] Compounds of proteins with a carbohydrate including mucins and mucoids mucoproteins.

**glycosécratory** (glí'kó'skrót'órí) *a*. [*Gk. glykys* sweet *L. secretus* set apart.] Connected with the secretion of glycogen.

**glycotropic** (glí'kót'róp'ík) *a*. [*Gk. glykys* sweet *trope* turn.] *Appel* factor secreted by prepancreatic and which inhibits peripheral action of insulin glycotrophic.

**gnathic** (náth'ík) *a*. [*Gk. gnathos* jaw] *Forst.* the jaw gnathal.

**gnathion** (náth'íón) *n* [*Gk. gnathos* jaw] Lowest point of the median line of the lower jaw.

**gnathism** (náth'ízim) *n* [*Gk. gnathos* jaw] Formation of jaw with reference to degree of projection.

**gnathites** (náth'íta) *n pl.* [*Gk. gnathos* jaw] The buccal appendages of arthropoda.

**gnathobase** (náth'óbás) *n* [*Gk. gnathos* jaw *basis* base.] An in aridly turned masticatory process on protopodite of appendages near mouth of Crustacea.

**gnathochilarium** (náth'ókíl'írim) *n*. [*Gk. gnathos* jaw *chilos* lip] First maxillae and sternal plate in Paurpoda, united in Diplopoda.

**gnathopod** (náth'ópód) *n* [*Gk. gnathos* jaw *pous* foot.] Any crustacean limb in oral region modified to assist with food.

**gnathopodite** (náth'ópód'íta) *n*. [*Gk. gnathos* jaw *pous* foot.] A maxilliped of an arthropod.

**gnathos** (náth'ós) *n*. [*Gk. gnathos* jaw] A median sclerite on ventral side of ninth tergum in Lepidoptera.

**gnathosoma** (náth'osó'má) *n*. [*Gk. gnathos* jaw *soma*, body] The mouth region including oral appendages, of Acarina.

**gnathostegites** (náth'ós'téjta) *n pl.* [*Gk. gnathos* jaw *stegos* roof.] Pair of covering plates for mouth parts of some crustaceans.

**gnathostomatous** (náth'osótóm'átis) *a*. [*Gk. gnathos* jaw *stoma*, mouth] With jaws at the mouth.

**gnathotheca** (náth'ókth'éká) *n* [*Gk. gnathos* jaw *theka* case.] The horny outer covering of a bird's lower jaw.

**gnathothorax** (náth'ókth'óraks) *n*. [*Gk. gnathos* jaw *thorax* chest.] The part of the cephalothorax posterior to protocephalon, in Mala constra.

**gneslogamy** (né'stóg'amí) *n*. [*Gk. gnesis* lawful *gamos* marriage.] Fertilization by an individual of the same species intraspecific syngamy.

**goblet cells**,—mucus-secreting cells of columnar epithelia chalice cells.

**Golgi apparatus** or complex [*C. Golgi* Italian histologist]. Cell-constituents, localized or diffuse, often consisting of separate elements, the Golgi bodies, batopetia, dictyosomes or pseudochromosomes, containing lipoprotein, and concerned with cellular synthesis and secretion originally apparatus

- reticular canalicular system, internal reticular apparatus the reticulum being possibly an artefact.
- Golgi, organs of.**—Golgi-Mazzoni corpuscles.
- Golgi-Mazzoni corpuscles** [*C Golgi* and *V Mazzoni*, Italian histologists]. Cylindrical end-organs or small Pacinian corpuscles at junction of tendon and muscle.
- golgi kinesia** (gól'jókínē'sia) *n.* [*C Golgi* Gk. *kinesis* movement.] Division of the Golgi apparatus during mitosis.
- golgiosomes** (gól'jéósmz) *n. pl.* [*C Golgi*; Gk. *soma* body.] Golgi bodies or material produced by division of the Golgi apparatus during mitosis.
- gomphosis** (góm'fó'sis) *n.* [Gk. *gomphos* bolt.] Articulation by insertion of conical process into a socket, as of roots of teeth into alveoli.
- gonad** (gón'ád) *n.* [Gk. *gonos* birth.] A sexual gland, either ovary or testes, or ovotestis.
- gonadectomy** (gón'ádék'tómí) *n.* [Gk. *gonos* birth *ektomē* out *gonos* cutting.] Excision of gonad castration in the male, spaying in female.
- gonadins** (gón'ádn) *n.* [Gk. *gonos* birth.] Active principle of sex glands controlling secondary sexual characteristics.
- gonadotrophins** (gón'ádót'rófins) *n. pl.* [Gk. *gonos* birth *trophē* to nourish.] Two prepituitary hormones: Follicle-stimulating hormone or prolan A gametogenetic or gametokinetic hormones thy-laketrin. 2. Lutealizing or inter-stitial-cell-stimulating hormone prolan B metaketrin. Chorionic gonadotrophin secreted by chorionic cells of placenta and excreted in pregnancy urine, resembling but not identical with lutealizing hormone. Serum gonadotrophins follicle-stimulating hormone in blood of pregnant mares, lutealizing hormone in that of women.
- gonadotropin** (gón'ádót'róp'ík) *n.* [Gk. *gonos* birth *trophē* turn.]

- Affecting the gonad *appl.* pre-pituitary hormones and certain hormones obtained from urine and other body fluids and tissues, particularly during pregnancy *appl.* effects gonadotrophic.
- gonadotropin** (gón'ádót'rópín) *n.* [Gk. *gonos* birth *trophē* turn.] Any gonadotropic hormone or substance.
- gonaduct** (gón'ádúkt) *n.* [Gk. *gonos* birth L. *ductus* led.] Gonoduct.
- gonal** (gón'ál) *n.* [Gk. *gonos* birth.] *Appl.* middle portion of genital ridge which alone forms functional gonad gonidial, *g.n.*
- gonangium** (gón'áng'jám) *n.* [Gk. *gonos* birth *angion*, vessel.] A gonotheca a dilated cup of perisarc protecting the blastostyle of Calyptoblastea.
- gonapophyses** (gón'ápóf'isēz) *n. pl.* [Gk. *gonos* birth *phē* from *phyein* to grow.] Chitinous outgrowths or valves subserving copulation in insects the component parts of a sting.
- gone** (gón'ē) *n.* [Gk. *gonos* generation.] One of four daughter cells of an auxocyte the generative portion of gonad an organism possessing a gone. They produce gone.
- gongylidia** (góng'gít'íd'ia) *n. pl.* [Gk. *gongylus* round *idia*, dim.] Hyphal swellings or modifications in fungi cultivated by certain ants.
- gonia** (gón'ia) *n. pl.* [Gk. *gonos* seed.] Primitive sex cells, spermatogonia or oögonia.
- gonial** (gón'ial'ik) *n.* [Gk. *gonos* angle.] In some vertebrates bone of lower jaw beside articular
- goni** (gón'ik) *n.* [Gk. *gonos* generation.] Part goes *goni* screen.
- gonidangium** (gón'ándán'jám) *n.* [Gk. *dim.* of *gonos* seed; *angion* vessel.] A structure producing or containing gonidia.
- gonidia** (gón'id'ia) *n. pl.* [Gk. *dim.* of *gonos* seed.] Minute reproductive bodies of many bacteria asexual non-motile reproductive cells produced upon gametophytes algal constituents of lichens. Sing gonidium.

- gonidial (gón'íd'íál) *a.* [Gk. *dim* of *gonē* seed] *Peri* gonidia.
- gonidiferous (gón'idí'érús) *a.* [Gk. *dim* of *gonē* seed L. *ferre* to carry] Bearing or producing gonidia.
- gonidium (gón'ídím'íúm) *n.* [L.L. *dim.* of Gk. *gonē* seed.] A gonidial structure smaller than a gonidium and larger than a gonimium.
- gonidiogenous (gón'idí'óy'énús) *a.* [Gk. *dim.* of *gonē* seed *gonēs* producing] Bearing or producing gonidia gonidiferous.
- gonidoid (gón'idí'óid) *a.* [Gk. *dim* of *gonē* seed *oidēs* form.] Like a gonidium *appl.* certain algae.
- gonidiphore (gón'idí'p'ór) *n.* [Gk. *dim* of *gonē* seed *phērōn* to bear] A aerial hypha supporting a gonidangium.
- gonidiphyll (gón'idí'p'íll) *n.* [Gk. *dim.* of *gonē* seed *phýllon* leaf.] A gametophyte leaf bearing gonidia.
- gonidium, —*ing* of gonidia.
- gonimium (góním'íúm) *n.* [Gk. *gonīmēs* productive.] One of the bluish-green gonidia of certain lichens.
- gonim blast (gón'ímoblást) *n. pl.* [Gk. *gonīmēs* productive *blastos* bud.] Filamentous outgrowths of a fertilized carpogonium f certain algae.
- gonimelobe (gón'ímóllób) *n.* [Gk. *gonīmēs* productive *lóbos* lobe.] A group of carposporangia borne on gonimoblast.
- gonion (gón'íon) *n.* [Gk. *goníōs*, angle.] The angle point on the lower jaw.
- gon blast (gón'óbllást) *n.* [Gk. *gonēs* offspring *blastos* bud.] A reproductive cell in animals.
- gonoblastid (gón'óbllás'tíd) *n.* [Gk. *gonēs* offspring *blastos* bud *gónion dim*] A blastostyle of Hydrozoa gonoblastidium.
- gonocalyx (gón'óká'lyks) *n.* [Gk. *gonēs* offspring *ályx* cup.] The bell of a medusiform gonophore.
- gonochrome (gón'ók'ró) *n.* [Gk. *gonēs* offspring *akhrōs* support.] A medusoid bearing sex-cells, in Hydrozoa.
- gonochorism (gón'ók'ó ríz) *n.* [Gk. *gonēs* offspring *chorismos* separation.] The history or development of sex differentiation sex determination dioecism.
- gonochoristic (gón'ók'óris'tík) *a.* [Gk. *gonēs* offspring *choristos* separated.] Having the sexes separate producing distinct males and females; dioecious.
- gonocol (gón'ók'ól) *n.* [Gk. *gonē* seed *kollos* hollow] The cavity containing the gonads.
- gonocytes (gón'ók'ýts) *n. pl.* [Gk. *gonē* seed *kytos* hollow] Sexual cells of sponges mother-cells of ova and spermatozoa.
- gonodendron (gón'ódn'drón) *n.* [Gk. *gonēs* offspring *dendron* tree.] A branching blastostyle in Physalia.
- gonoduct (gón'ódúkt) *n.* [Gk. *gonēs* birth L. *duktos* led.] A genital duct leading from gonad to exterior.
- gonogoneal (gón'óy'én'és) *n.* [Gk. *gonē* seed *gonēsis* descent.] Gametogenesis.
- gonomary (gón'óm'érí) *n.* [Gk. *gonēs* descent *meros* part.] Theory that paternal and maternal chromosomes remain in separate groups throughout lif separate grouping of paternal and maternal chromosomes during cleavage stages of some organisms.
- gononephrotome (gón'ón'ér'rótsén) *n.* [Gk. *gonē* seed *nephros* kidney *tomos* to cut.] Embryonic segment containing primordia of the urogenital system.
- gononucleus (gón'ónú'kléús) *n.* [Gk. *gonēs* begetting L. *nucleus* kernel] The generative nucleus or macronucleus of many Protozoa.
- gonophore (gón'ó'fór) *n.* [Gk. *gonē* seed *phōros*, to bear] An elongation of thalamus between corolla and stamens reproductive rood in hydroid colony.
- gonoplasm (gón'oplázím) *n.* [Gk. *gonē* seed *plasma*, mould.] The generative part of protoplasm.
- gonopodium (gón'óp'ódím) *n.* [Gk. *gonē* seed *pous* foot.] The modi-

fied anal fin serving as copulatory organ in male poeciliid fishes  
gonopod or clasper of male myriopods and insects.

gonopore (gōn'ōpōr) *n.* [Gk. *gonos* seed *poros* channel.] Reproductive aperture.

gonosome (gōn'ōsōm) *n.* [Gk. *gonos* seed; *sōma*, body.] The reproductive zooids of hydrosoma colony collectively.

gonosphaeri m (gō'ōsōf'rītōm) *n.* [Gk. *gonos* seed *sphaera*, globe.] An oosphere.

gonostyl' (gōn'ōstīl') *n.* [Gk. *gonos* birth *stylis* pillar.] The blastostyle sexual palpus or siphon of Siphonophora clasper of Diptera.

gonotheca (gōn'ōthēk'ā) *n.* [Gk. *gonos* birth *thēke* cup.] A transparent protective expansion of the permanent blastostyle or gonophore.

gonotokont,—an anisocyte, *q.v.*

go otome (gōn'ōtōm) *n.* [Gk. *gonos* birth; *tomos* to cut.] An embryonic segment containing the primordium of the gonad.

gonostoma (gōn'ōstōmā) *n.* [Gk. *gonos* offspring; *stoma*, hole.] Genital aperture, as in Arachnida gonostome.

gonozooid (gōn'ōzō'id) *n.* [Gk. *gonos* birth *zōon* animal *zōon* form.] A gonophore or reproductive individual of hydrosoma colony; zooid containing gonad.

gonydial (gōn'ōdīāl) *n.* [Gk. *gonys* lower jaw.] *Fort.* gonyx.

gonyx (gōn'ōx) *n.* [Gk. *gonys* lower jaw.] Lower part or keel of bird's bill.

Gracian f ilici [R. de Graaf Dutch anatomist]. A vesicular capsule in ovary and surrounding an ovum; ovarian with developing ova.

Graber' organ,—a complex larval organ, presumably sensory in Tabanidae.

gracilis (grā'sīlīs) *n.* [L. *gracilis* slender.] A superficial muscle on medial side of the thigh fasciculus of medulla oblongata nucleus of grey matter ventral to clava.

graduated (grād'ūatēd) *a.* [L. *gradi* step.] Tapering becoming longer or shorter by steps.

graft hybrid,—an individual formed from graft and stock, and showing characteristics of both graft chimaera.

grain (grān) *n.* [L. *granosus* grain.] The carypod or seed of cereals a granular prominence on the back of a sepal.

graminifolious (grām'īnīf'ōlīōs) *a.* [L. *gramosus* grass *foliosus* leaf.] With grass-like leaves.

graminivorous (grām'īnīv'ōrīōs) *a.* [L. *gramosus* grass *vorare* to eat.] Grass-eating.

Grandry's corpuscle [—Grandry Belgian anatomist] An end-organ of touch in beak and tongue of birds.

granella (grānēl'ē) *n. plur.* [L. *dim.* of *granosus* grain.] Oval refractile granules consisting chiefly of barium sulphate, found in the tubes of certain Sarcodina.

granellarium (grān'ēlārīōm) *n.* [L. *dim.* of *granosus*, grain.] The system of granellas-containing tubes of Sarcodina.

granose (grān'ōs) *a.* [L. *granosus* grain.] Appearance like chain of grains like some insect antennae; mouldiform.

granular (grān'ūlār) *a.* [L. *granosus* grain.] Consisting of grains or granules appearing as if made of granules.

granulation (grān'ūlā'shōn) *n.* [L. *granosus* grain.] A grain-like formation or eminence *appt.* arachnoid elevations or Pacchionian glands on outer surface of dura mater.

granul (grān'ūl) *n.* [L. *granulum*, small grain.] A small particle of matter small grain.

granul cells,—ovoid or spheroid cells formed of soft protoplasm containing basophil granules.

granule glands,—the prostatic glands of flatworms skin glands of amphibians.

granules of Nissl,—see Nissl granules.



- granulocytes** (grăn'ülôits) *n* *Plk.*  
[*L. granulum* small grain *Gk.*  
*kylos* cell.] Granular white blood  
corpuscles or polymorphs myeloid  
cells formed in bone marrow
- graphioxaster** (grăf'îbêkăstă'tēr)  
*n.* [*Gk. graphis* stylo; *Aex* six  
*aster* star] A hexaster spicul  
with long outwardly-directed fila-  
mentous processes from four rays.
- grater** (grăt'ē) *n.* [O *F. grater* to  
scrape.] A denticle of Eukce.
- gravid** (grăv'îd) *a.* [*L. gravidus*  
loaded.] *Appl.* female with eggs,  
or pregnant uterus.
- graviperception** (grăv'îpêrăp'ăshn)  
*n* [*L. gravis* heavy *perceptio* to  
feel.] Irritability to gravity geo-  
tropic reaction.
- gravitational** (grăv'îns'ăbônăl) *a.* [*L.*  
*gravis* heavy] *Appl.* water in  
excess of soil requirements, which  
sinks under action of gravity and  
drains way
- gravity** (grăv'îti) *n* [*L. gravis*  
heaviness.] The force of attraction  
of all bodies towards each other  
the tendency of terrestrial bodies to  
be drawn towards the earth  
centre.
- green glands**,—the excretory anten-  
nary glands of certain Crustacea.
- gregaloid** (grêg'ălôid) *n.* [*L. greg*  
flock *Gk. ridos* form.] *Appl.*  
colony of protozoa of indefinite  
shape usually with gelatinous base,  
formed by incomplete division of  
individuals or partial union of  
adults.
- gregarious** (grêg'ă rîds) *a.* [*L. greg*  
flock.] Tending to herd together  
colonial growing in clusters.
- gray matter**—tissue abundantly sup-  
plied with nerve cells of greyish  
colour internal to white matter in  
spinal cord external in cerebrum.
- gray nerve fibres**,—semitrans-  
parent grey or yellowish-grey  
gelatinous non-medullated cre-  
fibres comprising most of the  
fibres of the sympathetic system  
and some of the cerebro-spinal  
amyelinate fibres.
- groin** (grôin) *n.* [A.S. *grynde* depres-
- sion.] The depressed part of body  
between abdomen and thigh.
- groove** (groov) *n* [*Ort. groef*  
channel.] Any channel furrow or  
depression, as carotid costal optic,  
primitive vertebral groove.
- ground tis ue**,—*see* conjunctive  
parenchyma.
- growing point**,—a part of plant body  
at which cell-division is localised,  
generally terminal and composed  
of meristematic cells.
- growth factor** *G*—vitamin B<sub>2</sub> or  
riboflavin *q.v.*
- growth hormones**,—in animals,  
growth promoting pituitary secre-  
tions in plants, auxins.
- grumose** (groon'ôz) *a.* [*L. grumus*  
hillock.] Clotted knotted col-  
lected into granule masses  
grumous.
- grumulus** (groo'mülüs) *n.* [*Dim* of  
*L. grumus* hillock] Polar organ or  
caudal cell cluster in insect embryo.
- gryochrom** (grî'ôkrôm) *n.* [*Gk.*  
*gry* mouse *chroma*, colour] With  
Nissl granules irregularly scattered  
*appl.* neurones, as in spinal  
ganglia.
- guanidine** (gwăn'idin) *n.* [*Peru-*  
*vian. Awano* dung] A substance  
produced by oxidation of guanin,  
whose metabolism is regulated by  
parathyroids CH<sub>5</sub>N<sub>3</sub>.
- guanine** (gwăn'in) *n.* [*Peruvian,*  
*Awano* dung] A purine base found  
in some plants teleosts mammals,  
etc. C<sub>5</sub>H<sub>4</sub>ON
- guanophore** (gwăn'fôr) *n.* [*Peru-*  
*vian. Awano* dung *Gk. phorin* to  
bear] A yellow pigment-bearing  
cell an iridocyte.
- guanylic** (gwăn'îlik) *a.* [*Peruvian,*  
*Awano* dung] *Appl.* nucleic acid,  
yielding guanin, found in pancreas  
and liver
- guard** (gărd) *n.* [O *F. garder* to  
guard.] Rostrum of a belemnite.
- guard c lls**,—cells surrounding  
stomata of aerial epidermis of  
plant tissue.
- gubernacular** (gû'bêrnăk'ăllăr) *a.*  
[*L. gubernaculum* rudder] *Part*  
the gubernaculum.

**gubernaculum** (gŭ'bĕrnăk'ŭlŭm) *n* [*L. gubernaculum* rudder] A cord stretching from epididymis to scrotal wall mesocardial ligament tissue between gum and dental sac of permanent teeth strands of blastostylar ectoderm between gonophore and gonotheca in Hydro-medusae a posterior flagellum functioning as a rudder

**guest insect**,—an insect living or breeding in the nest of another

**gula** (gŭ'la) *n* [*L. gula* gullet.] The upper part of throat median ventral sclerite of insect head.

**gulamantum** (gŭ'lamĕn'tŭm) *n* [*L. gula* gullet *monstrum chin.*] Plate formed by fusion of gula and submentum in insects.

**gular** (gŭ'lar) *a* [*L. gula* gullet.] *Peri*. throat *appl* median and lateral plates between rami of mandible in Crossopterygii and Polypteri. *n*. An anterior unpaired horny shield on plastron of Chelonians.

**gullet** (gŭ'let) *n* [*O.F. goullet* from *L. gula* gullet.] The oesophagus, a muscular canal extending from mouth cavity to stomach the canal between cytotome and endoplasm of Ciliata.

**gum** (gŭm) *n* [*L. gummum* gum.] An exudation of certain plants and trees vegetable mucilage.

**gumiferous** (gŭmif'ĕres) *a* [*L. gummum* gum *ferre* to carry] Gum-producing or exuding

**gummosis** (gŭm'ŭs) *n* [*L. gummum* gum] Condition of plant tissues when cell-walls become gummy

**gums** (gŭm) *n*. *Adv* [*A.S. guma* jaws.] Dense fibrous tissues investing jaws *gingivae*

**gustatory** (gŭ'stôrĭ) *a* [*L. gustare* to taste.] *Peri* sense of taste *Appl* cells hairs, pores, calyculus (*g*) nerves.

**gut** (gŭt) *n* [*A.S. gaf* channel.] Intestine or part thereof according to structure of animal.

**gutta** (gŭ't'a) *n* [*L. gutta* drop] A small spot of colour on insect wing or elsewhere.

**guttate** (gŭ't'i) *a* [*L. gutta* drop.] Having drop-like markings.

**guttation** (gŭt'ăshŭn) *n* [*L. gutta* drop] Formation of drops of water on plants from moisture in air exudation of aqueous solutions as through hydathodes or by sporangio-phores, or by nectaries.

**guttiform** (gŭ't'fŕm) *a* [*L. gutta* drop *forma* shape.] Drop-like in the form of a drop

**guttulate** (gŭ't'ŭlăt) *a* [*L. guttula* small drop.] In the form of a small drop as markings.

**gymnanthous** (jim'nănthŭs) *a* [*Gk. gymnos* uncovered *anthos* flower] With no floral envelope *achlamydeous*.

**gymnetrous** (jim'nĕtrŭs) *a* [*Gk. gymnos* naked *strem* abdomen.] Without an anal fin.

**gymnoerian** (jim'nŏi'rĭn) *a* [*Gk. gymnos* naked *erion* small egg] *Appl* gonads when naked, or not enclosed in coelomic sacs *aplo* cysterian.

**gynaoblastic** (jim'nŏblăt'ĭk) *a* [*Gk. gymnos* naked *blastar* bod.] Without hydrothecae and gonothecae *appl* certain Coelenterata.

**gynocarpic** (jim'nŏkăr'pĭk) *a* [*Gk. gymnos* uncovered *karpos* fruit.] With naked fruit *appl* lichens with uncovered apothecia, mosses with expanded brymenium *gymnocarpeous*.

**gymnocidium** (jim'nŏkĭd'ĭm) *n* [*Gk. gymnos* uncovered *stis* house *idion* dim] A basal swelling of certain moss capsules.

**gymnocyte** (jim'nŏtĭ) *n* [*Gk. gymnos* uncovered *kytos* hollow] A cell without defining cell-wall *aplo* leucocyte.

**gynocytode** (jim'nŏtĭ'dŏd) *n* [*Gk. gymnos* naked *kytos* hollow *stis* form.] Cytode without cell wall or nucleus.

**gynogonous** (jim'nŏj'ŭnŭs) *a* [*Gk. gymnos* naked *gonos* offspring.] Naked when born *aplo* birds.

**gynogynous** (jim'nŏj'ĭntŭs) *a* [*Gk. gymnos* naked *gynē* female.] With exposed ovary

- gymnoplast** (jim nōplāst) *n* [Gk. *gymnos* naked *plaste* formed.] 1 rotoplasm without definite formation or cell-wall.
- gymnopterous** (jimnōp'tērūs) *n* [Gk. *gymnos* naked *pteron* wing] Having bare wings, without scales *Appl.* insects.
- gymnorhinal** (jim nōr'īnāl) *n* [Gk. *gymnos* naked *rhis* nose] With nostril region not covered by feathers as in some birds.
- gymnosomatus** (jimnōsōm'ātūs) *n* [Gk. *gymnos* naked *sōma* body] Having no shell or mantle as certain molluscs.
- gymnospermous** (jimnōspēr'mūs) *n* [Gk. *gymnos* uncovered *spērma* seed.] Having seeds not enclosed in a true ovary as conifers.
- gymnosperm** (jim nōspēr) *n* [Gk. *gymnos* naked *spērma* seed] A naked germ or spore not enclosed in a protective envelope.
- gymnostomatous** (jim nōstōm'ātūs) *n* [Gk. *gymnos* naked *stoma* mouth.] Naked-mouthed having no peristome *Appl.* mosses *gymnostomous*.
- gynaecanter** (jin'ēkāl ēr) *n* [Gk. *gyn* woman *anter* man] A male ant resembling female *gynaecomorphic* male.
- gynaecium**,—**gynoecium**, *g* *n*
- gynaecoid** (jin'ēkōid) *n* [Gk. *gyn* woman *eidos* form.] An egg-laying worker ant.
- gynaecophore** (jin'ēkōfēr) *n* [Gk. *gyn* woman *phoros* to carry] Canal or groove of certain worms formed by unrolling of sides, in which the female is carried *gynaecophoric* or *gynaecophoral* groove.
- gyns de** (jinān dēr) *n* [Gk. *gyn* female *de* man] A gynandromorph.
- gynandria** (jinān drēm) *n* [Gk. *gyn* women *de* man] Her maphroditism.
- gynandromorph** (jinān drēmōrf) *n* [Gk. *gyn* woman *de* man *morphe* form.] An individual exhibiting spatial mosaic of male and female characters *f* intersex.
- gynandromorphism** (jinān drēmōrfism) [Gk. *gyn* women *de* man *morphe* form.] Condition of being a gynandromorph or manifesting a mosaic of male and female sexual characters, as having one side characteristically male the other female.
- gynandrophore** (jinān drōfēr) *n* [Gk. *gyn* woman *de* man *phoros* to carry] An axial prolongation bearing a sporophyll.
- gynandrosporous** (jinān drōspō rūs) *n* [Gk. *gyn* woman *de* man *sporos* seed.] With androspores adjoining the oogonium as in some algae.
- gynandrous** (jinān drūs) *n* [Gk. *gyn* woman *de* man.] Having stamens fused with pistils as in some orchids.
- gynanthorons** (jinān'thērōns) *n* [Gk. *gyn* woman *anthos* flower] Having stamens converted into pistils.
- gynase** (jinās) *n* [Gk. *gyn* woman.] A female-determining factor in the form of an enzyme or hormone.
- gynatrium** (jin'ātrīum) *n* [Gk. *gyn* woman *L. atrium* entrance hall.] Female genital pouch or vestibulum, of certain insects.
- gyne** (jinē) *n* [Gk. *gyn* woman.] A female ant.
- gyn** *clum*,—**gynoecium**, *g* *n*
- gynotype** (jin ētp) *n* [Gk. *gyn* woman *typos* pattern.] Type specimen of the female of species.
- gyn base** (jin ōbās) *n* [Gk. *gyn* woman *L. basis* base] A gynocrium-bearing receptacle of certain plants condition in which style appears to arise from ovary.
- gynobasal style**,—a style arising from base of carpel.
- gynodioecious** (jinōdiē āsūs) *n* [Gk. *gyn* woman *de* twice *oikos* house.] *Appl.* plants producing female or hermaphrodite flowers only.
- gynoeceus** (jinē āsūs) *n* [Gk. *gyn* woman *oikos* house.] The pistils, carpels, or female organs of a flower.

**gynogensis** (j'noyēn ēsh) *n* [Gk. *gynē* woman *genesis* descent.] Development from eggs penetrated by the spermatozoon but not embodying its nucleus as in some nematodes.

**gynogonidia** (j'nōgōnōd'ia) *n. pl.* [Gk. *gynē* woman *gonia* small seed.] Femal sexual elements formed after repeated division of parthenogonidia in Mastigophora.

**gynomitogony** (j'nōmōtōg'ōnōs) *n* [Gk. *gynē* female *mitos* part *gonē* generation.] The development of an egg fragment, obtained before fusion with male nucleus and containing maternal chromosomes only.

**gynomonoecious** (j'nōmōnōē sīs) *a* [Gk. *gynē* woman *monos* alone *oikos* house.] *Appl.* plants with pistillate and hermaphrodite flowers only.

**gonophore** (j'nōfōr) *n* [Gk. *gynē* woman *phorōn* to carry.] A stalk supporting the ovary elongation of thalamus between stamens and pistil female gonophore.

**gynospore** (j'nōspōr) *n* [Gk. *gynē* female *spora* seed.] Female spore megaspore embryo-sac.

**gynostegium** (j'nōstēg'ium) *n* [Gk. *gynē* woman *stegē* roof.] A protective covering for a gynoecium.

**gynostecium** (j'nōstē mīum) *n* [Gk. *gynē* woman *stēnos* warp.] The column composed of united pistil and stamens in orchids.

**gypsophil** (j'p sōfil) *a*. [Gk. *gypsis* chalk, *philos* *philein* to love.] Thriving in soils containing chalk or gypsum gypsophilous calcicolous, calciphil.

**gypsophyt** (j'p sōft) *n*. [Gk. *gypsis* chalk *phytos* *phyton* plant.] A gypsophil plant calcicole, calcipete calciphile calciphyte.

**gyral** (j'rāl) *a*. [L. *gyrus* circle.] *For* *gyrus* *peri* circular or spiral movement.

**gyration** (j'rā shōn) *n*. [L. *gyro* to revolve.] Rotation as of cells whorl of spiral shell.

**GYT** (jir) *n*. [Gk. *gyros* L. *gyrus*

circle.] Circular movement spiral coiling as of chromatids.

**gyrencephali** (j'rēnkēfāl'ia) *a*. [Gk. *gyros* circle *encephalon* brain.] Having cerebral convolutions gyrencephalous *Opp* linocephalic.

**gyri**,—*pl.* of *gyrus*.

**gyrose** (j'rōs) *a* [L. *gyro* to revolve.] With undulating lines sinuous.

**gyrus** (j'rūs) *n*. [L. *gyros* circle.] A cerebral convolution a ridge winding between two grooves.

## H

**habenula** (hābēn'ūla) *n* [L. *habenula*, strap.] A name *appl.* certain band like structures *a*. Habenular *appt.* a commissure of epithalamus.

**habitat** (hāb'itāt) *n*. [L. *habitare* to inhabit.] The locality or external environment in which a plant or animal lives.

**habituation** (hāb'it'ū shōn) *n* [L. *habituare* to bring into habit.] The adjustment, effected in a cell or in an organism, by which subsequent contacts of the same stimulus produce diminishing effects.

**habitus** (hāb'itūs) *n*. [L. *habitus* appearance.] The general appearance or conformation characteristic of a plant or an animal constitutional tendency.

**hadrocentric** (hād'ōshn'trīk) *a*. [Gk. *hadros* thick *entron* centre.] With phloem surrounding xylem.

**hadrosma** (hād'ōm) *n* [Gk. *hadros* thick.] Conducting tissue of xylem hadromatone.

**Haeckel's law** [E. H. Haeckel German zoologist]. Biogenetic law recapitulation theory *q. v.*

**haem** (hēm) *n* [Gk. *haima* blood.] A blood substance, oxidizing to haematin  $C_{54}H_{40}O_8N_4Fe$ .

**haemachrome** (hē'māk'rōm) *n* [Gk. *haima* blood *chroma* colour.] Colouring matter found in blood.

**haemocyte** (hē'kōit) *n*. [Gk. *haima* blood *kytos* hollow.] A blood corpuscle.

**haemad** (hē mād) *adv.* [Gk. *haima* blood.] Situated on same side of vertebral column as heart.

**haemal** (hē māl) *a.* [Gk. *haima* blood.] *Pers.* blood or blood-vessels; situated on same side of vertebral column as heart.

**haemamoeba** (hē māmē'bā) *n.* [Gk. *haima*, blood *amēbe* change.] Protozoan with an amoeboid trophozoitic stage parasitic in a red blood-corpuscle.

**haemangioblast** (hēmān'jōblāst) *n.* [Gk. *haima* blood *angēion* vessel *blastos* bud.] A blood island, *q.v.*

**haemopoietic** (hē mīpōēt'ik) *a.* [Gk. *haima* blood *poieo* to form.] Blood forming haemopoietic.

**haemophysis** (hē mīpōf'is) *n.* [Gk. *haima*, blood *phyeo* from *physis* to grow] One of plate-like or pine-like processes growing from the latero-ventral surfaces of vertebral centrum.

**haemal** (hēm'āl) *a.* [Gk. *haima* blood.] *Pers.* blood or blood vessels.

**haematid** (hēm'āid) *n.* [Gk. *haima* blood.] Red blood-corpuscle.

**haematin** (hēm'āin) *n.* [Gk. *haima* blood.] A pigment formed by decomposition of haemoglobin containing iron and having the property of carrying oxygen protohaem  $C_{54}H_{56}O_4N_4Fe$ .

**haematobi** (hēm'āib'ik) *a.* [Gk. *haima* blood *bios* life.] Living in blood.

**haematobium** (hēm'āib'ium) *n.* [Gk. *haima* blood *bios* life] An organism living in blood.

**haematoblast** (hēm'āib'lāst) *n.* [Gk. *haima* blood *blastos* bud.] A cell that will develop into red blood-corpuscle thrombocyte blood platelet.

**haematochrom** (hēm'āitokrōm) *n.* [Gk. *haima* blood *chromos* colour] A carotenoid red pigment of certain algae.

**haematocryal** (hēm'āitokri'āl) *a.* [Gk. *haima*, blood *kryos* cold] Cold blooded.

**haematocyanin** (hēm'āitōs'ānin) *n.*

[Gk. *haima* blood *kyanos* dark blue] Haemocyanin, *q.v.*

**haematocytozoan** (hēm'āitōtōzōn) *n.* [Gk. *haima* blood *kytos* hollow *zōon* animal.] An intra-corpuscular blood parasite.

**haematodocha** (hēm'āitōdōk'h) *n.* [Gk. *haima* blood *dōche* receptacle] A fibro-elastic bag at base of palpal organ Arachn.

**haematogen** (hēm'āitōjēn) *n.* [Gk. *haima* blood *gennao* birth.] A nucleoprotein containing iron.

**haemogenesis** (hēm'āitōjēns'is) *n.* [Gk. *haima* blood *gennao* descent.] The formation of blood.

**haematogenous** (hēm'āitōjēns'is) *a.* [Gk. *haima* blood *gennao* birth.] Formed blood derived from blood.

**haematoidin** (hēm'āitōid'in) *n.* [Gk. *haima* blood *eido* form.] An iron-free derivative of haemoglobin, forming crystals in blood clots and identical with bilirubin.

**haematolysis** (hēm'āitōl'is) *n.* [Gk. *haima*, blood *lysis* loosening] Haemolysis *q.v.*

**haematophagous** (hēm'āitōf'āgūs) *a.* [Gk. *haima* blood *phagoo* to eat.] Feeding on blood or obtaining nourishment from blood.

**haematophyt** (hēm'āitōf'it) *n.* [Gk. *haima* blood *phyton* plant.] A vegetable micro-organism in blood.

**haematoporphyrin** (hēm'āitōpōr'firin) *n.* [Gk. *haima* blood *porphyrin* purple.] A iron-free pigment formed by decomposition of haematin  $C_{54}H_{56}O_4N_4$ .

**haematosis** (hēm'āitōs'is) *n.* [Gk. *haimatoos* to change to blood.] Blood formation.

**haematothermal** (hēm'āitōthēr'māl) *a.* [Gk. *haima* blood *thermos* warm] Warm-blooded.

**haematozoan** (hēm'āitōzōn) *n.* [Gk. *haima* blood *zōon* animal.] A animal parasite in blood.

**haem erythri** (hēm'ērit'h rin) *n.* [Gk. *haima* blood *erythros* red.] A red respiratory pigment of cor-puscles in body fluid of sipunculids and some annelids haemerythrin.

- ha mē (hē mē) *n* [Gk. *haima* blood.] *Peri* blood.
- haemin (hē min) *n* [Gk. *haima* blood.] Haem. 'Mor. de formed in blood clot  $C_{54}H_{72}O_4N_4FeCl$ .
- haemoblast (hē'moblāst) *n* [Gk. *haima* blood *blastos* bud.] A cell which gives rise to an erythroblast haematoblast.
- haemochromes (hē mōkrōmā) *n. pl.* [Gk. *haima* blood *chroma* colour.] Blood pigments, as haemoglobin haemocyanin chlorocruorin erythrocrorin, haemoerythrin.
- haemochromog *n* (hē mōkrō mōjēn) *n*. [Gk. *haima* blood *chroma* colour *gros* birth.] A chromoprotein produced by alkali and reduction of haemoglobin.
- ha moclasi (hē'mōklās'tik) *n* [Gk. *haima* blood *diastis* broken.] Breaking down blood cells *opp* tissues *opp* haemoplastic
- haemocoel (hē mōēl) *n* [Gk. *haima* blood *koela* hollow.] An expanded portion of the blood system which replaces the true coelom.
- haemocoelia (hē'mōkōēl'ia) *n* [Gk. *haima* blood *koela* dust.] Minute fat droplets entering or leaving cells chyloemicroa, *q*.
- haemocyanin (hē mōē'ānēn) *n* [Gk. *haima* blood *kyanos* dark blue.] A haemoglobin-like blood pigment containing copper instead of iron in molluscs crustaceans and some arachnids.
- haemocyte (hē'mōēt) *n* [Gk. *haima*, blood *kytos* hollow.] A blood cell as in insects.
- haemocytoblast (hē'mōē'tōblāst) *n* [Gk. *haima* blood *kytos* hollow *blastos*, bud.] Primitive stem cell from which all blood cells are derived lymphoid haemoblast lymphoidocyte.
- haemocytolysis (hē-mōē'tōl'is) *n* [Gk. *haima* blood *kytos* hollow *lysis* to dissolve.] Breaking up of red blood-corpuscles by solution.
- haemocytoptysis (hē mōē'tōtrīp'sis) *n* [Gk. *haima* blood *kytos*
- hollow; *trōein* to rub.] Breaking up of blood-corpuscles by pressure.
- haemoerythrin (hē mōērith'sin) *n* [Gk. *haima* blood *erythra* red.] A red respiratory pigment in certain invertebrates haemerythrin.
- haemofuscin (hē'mōfūs'sin) *n*. [Gk. *haima* blood *L. fusca* tawny.] A yellow blood pigment deposited under various pathological conditions.
- haemoglobin (hē mōg'lobin) *n*. [Gk. *haima* blood *globos* sphere.] The red respiratory pigment of blood of vertebrates, consisting of haematin united to globin.
- haemohistioblast (hē mōhīs'tōblāst) *n*. [Gk. *haima* blood *histos* tissue *blastos* bud.] A free macrophage in blood especially of veins.
- haemoid (hē'mōid) *n*. [Gk. *haima* blood *eides* form.] Resembling blood.
- haemolymph (hē'mōlīm) *n* [Gk. *haima* blood *L. lymphē* water.] A fluid found in coelom of some invertebrates regarded as equivalent to blood and lymph of higher forms.
- haemolysis (hē mōl'is) *n*. [Gk. *haima* blood *lysis* to dissolve.] A substance developed in or added to blood serum capable of destroying of blood-corpuscles.
- ha molyis (hē'mōl'is) *n*. [Gk. *haima* blood *lysis* looking.] The lysis or solution of red blood-corpuscles erythrocytolysis *lak*ing.
- haemophilia (hēm'ōfīl'ia) *n*. [Gk. *haima*, blood *philia* loving.] Absence of ready coagulation of shed blood, sex-linked hereditary characteristic.
- haemoplasmodium (hē mōplāsmō'diēm, plā-) *n* [Gk. *haima* blood *plasma* mould.] A unicellular parasite of blood.
- haemoplastic (hē mōplās'tik) *n* [Gk. *haima* blood *plastis* formed.] Blood-forming haemopoietic *Opp* haemoclastic.

**haemopoiesis** (hē'mōpōi'ēz) *n* [Gk. *haema*, blood *poiesis* making] The formation and development of blood cells.

**haemopoietic** (hē'mōpōi'ētik) *a*. [Gk. *haema* blood *poietikos* productive] Blood-forming *pert* haemopoiesis haemopoietic.

**haemopsonia** (hē'rōp'sōnīn) *n* [Gk. *haema* blood *opsōn* to cater] An opsonin for erythrocytes

**haemorrhoidal** (hēmōrōid'al) *a*. [Gk. *haema* blood *rhōin* to flow] Rectal *appl* blood vessels nerve

**haemosiderin** (hēmōsid'ērīn) *n* [Gk. *haema* blood *sider* iron] A yellow pigment of blood giving an iron reaction.

**ha mostatic** (hē'mōstātik) *a* [Gk. *haema* blood *statikos* causing to stand] *Appl* membrane crossing joint between trochanter and femur in autotomy of limb of some arthropods

**ha motoxin** (hē'mōtōk'sin) *n*. [Gk. *haema*, blood (*rhōin* poison.)] A toxin which produces haemolysis.

**ha motropin** (hē'mōtrōp'īk) *n* [Gk. *haema*, blood *trope* turn.] Affecting or acting upon blood.

**ha mozoia** (hē'mōzō'ia) *n* [Gk. *haema* blood *mozo* animal.] Granules of black pigment, the residue from digestion of haemoglobi by malarial parasites.

**hai** (hār) *n* [A.S. *hær*] Any epidermal filamentous outgrowth consisting of one or more cells, varied in shape a thread-like or filamentous outgrowth of epidermis of animals

**actum** *q* *v*

**hair cells**,—sensory cells in organ of Corti.

**hair follicle**,—tubular sheath formed by invagination of epidermis and surrounding base of hair

**half-inferior**,—having ovary but partially adherent to calyx.

**half-spindle**,—unipolar spindle as in meiosis of some insects.

**half-terete**,—rounded on one side flat on the other

**haloplankton**,—haloplankton *q* *v*

**Haller's organ** [*G. Haller* German zoologist]. A tarsal chemoreceptor in ticks.

**hallux** (hāl'uks) *n*. [L. *hallux* great toe.] First digit of hind-limb.

**halm**,—hawlum.

**halobios** (hāl'ōbi'ōs) *n*. [Gk. *halo* sea *bios* life.] Sum total of organisms living in the sea.

**halohaline** (hāl'ōlin'ālik) *a*. [Gk. *halo* sea *haline* marsh.] *Pert* marine organisms modified to live in fresh water

**halophilous** (hāl'ōf'i'ūs) *a*. [Gk. *halo* salt *philo* to love.] Salt-loving thriving in presence of salt halophilic.

**hal phyte** (hāl'ōf'it) *n* [Gk. *halo* salt *phyton* plant.] A shore plant capable of thriving on salt, unpregnated soils.

**haloplankton** (hāl'ōplāng'kton) *n*. [Gk. *halo* sea *plankton* wanderer] The organisms drifting in the sea also haloplankton.

**halosere** (hāl'ōsēr) *n*. [Gk. *halo* salt L. *sere* to put in a row] A plant succession originating in saline areas.

**halteres** (hāl'tēr'ēt) *n*. *pl* [Gk. *halo* weight.] A pair of small capitate bodies representing rudimentary posterior wings in Diptera balancers, poeera.

**hamate** (hām'āt) *a* [L. *hamatus* hooked.] Hooked or hook-shaped as the tip hamone uncinate.

**hamatum** (hām'āt'um) *n* [L. *hamatus* hooked.] The unciform bone in the carpus, probably corresponding to fourth and fifth distals of a typical pentadactyl limb.

**hamirostrate** (hām'irō'strāt) *a*. [L. *hamus* hook *astrum* beak.] Having hooked beak.

**hamstrings**,—tendons of insertion of the posterior femoral muscles, *i.e.* of semitendinosus semimembranosus and biceps.

**hamula** (hām'ulā) *n*. [L. *hamulus* little hook.] Retinaculum, of insects fused ventral ppendages acting with caudal furcula in spring-tails or Collembola hamulus, *q* *v*

- hamular** (hām ūlār) *n* [*L. hamulus* hook.] Hooked hook-like.
- hamulus** (hām ūlās) *n*. [*L. hamulus* little hook.] A hooklet, or hook-like process minute hook-like process on distal barboles which aid in interlocking of feather barbs retinaculum of Hymenoptera.
- hamus** (hām ūs) *n* [*L. hamus* hook.] Hooked part of uncus in male Lepidoptera.
- hapaxanthous** (hāp'aksān'thūs) *n*. [*Gk. hapax* once *anthos* flower] With only a single flowering period.
- hapaxanthic** (hāp'aksān'thik) *adj*. pollinanthic.
- haplobiont** (hāp'lōb'īōnt) *n*. [*Gk. haplos* simple *bion* living] An organism characterized by one kind of individual. *Opp* diplobiont.
- haplocanlescent** (hāp'lōkōlē'sēnt) *n*. [*Gk. haplos* simple *L. canis* stem.] With simple axis is capable of producing seed on the main axis.
- haploclamydeous** (hāp'lōklāmīd'ēūs) *n*. [*Gk. haplos* simple *chlamy* cloak.] Having rudimentary leaves in connection with sporophylls.
- haplo-diploid** (hāp'lōdīp'lōid) *n*. [*Gk. haplos* simple *diploos* double *side* form.] *Appl* sex differentiation in which the male is haploid the female diploid.
- haplodont** (hāp'lōdōnt) *n*. [*Gk. haplos* simple *odon* tooth.] Having molars with simple crowns.
- haploid** (hāp'lōid) *n*. [*Gk. haplos* simple *oides* form.] Having the number of chromosomes characteristic of mature germ-cells for the organism in question *appl* the typical gametic number of chromosomes after meiosis. *n*. Organism having one genome *cf* diploid.
- haplomitosis** (hāp'lōmītō'sis) *n*. [*Gk. haplos* simple *mitos* thread.] Type of cell division where nuclear granules form chromosomes which withdraw in two groups or divide transversely in the middle.
- haplont** (hāp'lōnt) *n*. [*Gk. haplos* simple *on* being] An organism having haploid somatic nuclei.

- haploperitomeous** (hāp'lōpērītō-mōūs) *n*. [*Gk. haplos* simple *peri* around *stoma* mouth.] Having a peristome with single row of teeth, *appl* mosses.
- haplopetalous** (hāp'lōpēt'ālōūs) *n*. [*Gk. haplos* simple *petalos* petal.] With a single row of petals.
- haplophase** (hāp'lōfāz) *n*. [*Gk. haplos* simple *phasis* aspect.] Stage in life-history of an organism when nuclei are haploid gametophyte phase.
- haploptile** (hāp'lōptīl -pīl) *n*. [*Gk. haplos* simple *ptilos* feather] Single neoptile without rachis, formed by precocious development of the barbs of the teleoptile.
- haplois** (hāp'lōis) *n*. [*Gk. haplos* simple.] Halving of the chromosomal number during meiosis reduction and disjunction.
- haplomonous** (hāp'lōmōn'ōūs) *n*. [*Gk. haplos* simple *stemon* staminal] Having one whorl of stamens.
- haplotype** (hāp'lōtīp) *n*. [*Gk. haplos* simple *type* pattern.] The only species in a genus originally and thereby becoming genotype.
- haplogynous** (hāp'lōg'ynōūs) *n*. [*Gk. haplos* simple *gynē* yoke] *Appl* genes in haploid organisms hemizygous.
- haptera** (hāp'tērā) *n. pl.* [*Gk. haptere* to fasten.] Holdfasts, special disc-like outgrowths from the stem-like portion of certain algae which serve as organs of attachment.
- hapti** (hāp'tīk) *n*. [*Gk. haptērēn*, to touch.] Part touch *appl* stimuli and reactions.
- haptogen** (hāp'tōjēn) *n*. [*Gk. haptērēn*, to fasten *gōnē* producing] *Appl*. a linking membrane of solidified protein which prevents miscibility.
- haptomonad** (hāp'tōmōn'ād) *n*. [*Gk. haptērēn* to fasten *monas* unit.] An attached form of certain parasitic Flagellata *cf* nectomonad.



**haptophores** (hăp'tôfôrz) *n. plu* [Gk. *haptērōn* = (taken) *pherein* to carry] The combining qualities of the molecule of a toxin, lymphoposonin precipitin or agglutinin of toxophores.

**haptotropic** (hăp'tôtrôp'ik) *a* [Gk. *haptērōn* to touch *trôpē* turn.] Appl curvature of a plant organ due to contact stimulus thigmotropic.

**haptotropism** (hăp'tôtrôp'izm) *n* [Gk. *haptērōn* to touch *trôpē* turn.] Response to contact stimulus as in tentacles tendrils, stema.

**haptotype** (hăp'tôtip) *n* [Gk. *haptērōn* to touch *typos* pattern.] An isotype collected with the holotype but possibly taken from another plant.

**Harderian gland** U / J Harder Swiss anatomist. A accessory lacrimal gland (third eyelid or nictitating membrane).

**harlequin lobe**,—a tricuscular lobe with cells differing from those of other lobes, in certain Hemiptera.

**harmoni star**—an articulation formed by projection of edges of surfaces as between palatine bones.

**harmoids** (hărmô'idz) *n* [Gk. *harmoss* fitting] Arrangement and adaptation response to stimulus.

**hormones** (hărmô'n) *n* [Gk. *hormōnē* = (range)] One of the hormones which influence growth and nutrition.

**harpagones** (hăp'păgô'nēz) *n. plu* [L. *harpagē* hook] Claspers or valves of certain male insects pair of sclerites between harpes and claspers in mosquitoes harpes Lepidoptera.

**harpes** (hăp'pēz) *n. plu* [Gk. *harpē* sickle] Chitinous processes between the claspers of mosquitoes claspers alvea of Lepidoptera.

**Hassall's concentric corpuscle** [A H Hassall English physician.] Epithelial cell nests in medulla of thymus.

**hastate** (hăst'ât) *a* [L. *hastis* spear] Spear-shaped more or less triangular with the two basal lobes divergent appl leaf markings.

**Hatschek's** *n* phridium [B Hatschek Austrian zoologist.] A nephridium between notochord and preoral pit in Cephalochorda.

**Hatschek's pit**,—a mucin-secreting gland in roof of oral cavity in Cephalochorda preoral pit.

**haustrum** (hôm) *n* [A.S. *hauw*] The stem of such plants as possess the stem of a grass.

**haustellat** (hăst'ellât) *a*. [L. *hauserē* = suck.] Having a proboscis adapted for sucking.

**haustillum** (hăst'ill'um) *n* [L. *hauserē* to suck] A proboscis adapted for sucking.

**haustoria**,—*pl*s of haustorium.

**haustorial** (hăst'ôr'îl) *a* [L. *hauserē* = drink] Pert or resembling haustorium.

**haustorium** (hăst'ôr'îum) *n* [L. *hauserē* = drink] An outgrowth of stem root or hyphae of certain parasitic plants which serves to draw food from the host plant sucker an outgrowth of embryonic which extends to nutritive tissue in certain non-parasitic plants.

**haustra** (hăst'râ) *n. plu* [L. *hauster* drawer] Recesses of sacculations of the colon between phloem semi-lunares *Sing* haustrium.

**Haversian canals** [C Havers English anatomist.] Small canals in bone in which lie blood-capillaries, nerve and lymph-space.

**Haversian system**,—a Haversian canal the surrounding concentric lamellae and lacunae with canaliculi.

**H-disc**,—lighter region in anisotropic band of myofibrillae Hensen disc.

**head-cap**,—apical part or galea of head of spermatozoon perforatorium.

**head-case**,—the outer hard covering of insect head.

**head-cell**,—one of the cells on manubrium of antheridium of Chara.

**head-kidney**—the pronephric portion of kidney in vertebrates usually represented only in embryo; nephridium usually developed in cephalic segment of invertebrates.

**heart** (hârt) *n.* [A.S. *heorte*] A hollow muscular organ with varying number of chambers which by rhythmic contraction keeps up circulation of blood core or central portion of tree or frust.

**heart wood**—the darker harder central wood of trees duramen.

**heat** (hêt) *n.* [A.S. *heote*] A kind of energy manifested in various ways the sensation of warmth produced by stimulation of special organs the period of sexual desire.

**heat pot**—a special area on the skin at which nerve endings sensitive to heat are found.

**hectocotylus** (hêk'tokô'tîlîs) *n.* [Gk. *hektôn* hundred *kytlos* cup.] One of the arms of male cephalopod, specialized to effect transference of sperms.

**hedon** (hêdôn'îk) *n.* [Gk. *hedone* pleasure.] *Appl.* skin glands of certain reptiles, which secrete mucus and are specially active at mating season.

**heel** (hêl) *n.* [A.S. *hele*.] Hinder or posterior lateral portion of foot taken beyond of tooth spinule at base of tibia in Hymenoptera.

**heliotherm** (hê'liô'therm) *n.* [Gk. *helios* least *therme* heat.] A plant that thrives with the minimum of heat, as alpine plants.

**helices**—*pl.* of helix.

**helicin** (hê'lihn) *n.* [Lk. *Helix* spiral.] Spiral convoluted banded *appl.* certain convoluted and dilated arteries in penis *part* outer rim of penna.

**helicoid** (hê'likôid) [Gk. *helix* spiral *oides* like.] Spiral shaped like snail's shell *part* type of sympodial branching in which sympodium consists of fork branches of same side.

**helicoid cym**—an inflorescence produced by suppression of successive axes on same side thus causing the sympodium to be spirally twisted.

**helicorubin** (hê'likôroob'îo) *n.* [L. *helix* spiral *ruber* red.] A red pigment of gut of pulmonate gastropods.

**helicotr ma** (hê'likôtrî'mâ) *n.* [Gk. *helix* spiral *tréma* hole.] A small opening near summit of cochlea by which the scalar vestibuli and tympani communicate.

**hell phili** (hê'li'filî) *n.* [Gk. *helios* sun *phileo* to love.] Adapted for relatively high intensity of light heliophilic, heliophilous. *Opp.* heliophobic, skiophil.

**heli phobic**—skiophil *q.v.*  
**heliophyte** (hê'liô'fitî) *n.* [Gk. *helios* sun *phyton*, plant.] A sun plant *appl.* shade plant or skiophyte.

**helicals** (hê'liô'sh) [Gk. *helios* sun.] Production of discoloured spots or markings on leaves through concentration of sun on them solarisation.

**heliotaxis** (hê'liô'tâk'sh) *n.* [Gk. *helios* sun *taxis* arrangement.] Locomotor or other response to stimulus of sunlight.

**heliotropism** (hê'liô'trô'pîz'm) *n.* [Gk. *helios* sun *trepein* to run.] Curvature of organisms or certain parts in response to the stimulus of sunlight.

**helix** (hê'liks) *n.* [Gk. *helix* spiral.] A spiral the coiled spiral arrangement of certain structures in invertebrates the outer rim of external ear.

**helmet** (hê'mêt) *n.* [O.F. *helmet* head-covering.] The process of bill of hornbills the bony plates covering head of certain extinct fishes the gales of flowers and of insects.

**helminthology** (hê'mîn'thô'lô'jî) *n.* [Gk. *helminx* worm *logos* discourse.] The study of the natural history of worms the study of parasitic flatworms and roundworms.

- hel** phyte (hél'ôfít) *n* [Gk. *halos* marsh *phytos* plant.] A marsh plant a cryptophyt growing in soil saturated with water
- helotism** (hél'ôtizm) *n* [Gk. *helotes* serf from *Helos* Laconian town.] Symbiosis in which the one organism enslaves the other and forces it to labour in its behalf *g* in lichens in some species of ants
- hema** —see haema
- hemelytron** (hémél'itron) *n* [Gk. *hemis* half *elytron* sheath] Proximally hardened forew. of certain insects elytron of certain worms hemelytrium
- hemera** (hémér'á) *n* [Gk. *hemera* day] The time during which fossiliferous strata constituting one of sedimentary rocks were deposited.
- hemeranthous** (hémérán'thús) *n* [Gk. *hemera* day *anthos* flower] Flowering by day *hemeranthic*
- hemer phyt** (hémérôfít) *n* [Gk. *hemera* time *phytos* plant] A cultivated plant
- hemibasilidism** (hém'ibásid'ízim) *n* [Gk. *hemis* half *basis* base *basidion* stem] The promycelium of the Ustilaginales
- hemibathyal** (hém'ibáthiál) [Gk. *hemis* half *bathys* deep *halos* lf] *Peri* plankton between littoral and bathyal zones.
- hemibranch** (hém'ibráŋk) *n* [Gk. *hemis* half *brachios* gills.] Gill with gill filaments on one and only half-gill.
- hemicellulase** (hém'fél'sáls) *n* [Gk. *hemis* half *L. cellosa* small cell.] An enzyme which effects hydrolysis of hemicellulose occurring in endosperm fungi and certain invertebrates
- hemicellulos** (hém'fél'ôls) *n* [Gk. *hemis* half *L. cellosa* small cell] One of several polynuclears, chemically unrelated to cellulose occurring as cell wall constituents in cotyledons endosperms and woody tissues, and serving as reserve food
- hemicephalous** (hém'ikéfal'ús, -éfé.) *n* [Gk. *hemis* half *cephalos* head.] *Appl* insect larvae with reduced head.
- hemichlamydeous** (hém'iklamíd'ús) *n* [Gk. *hemis* half *chlamys* cloak.] Having ovuliferous scale inverted and bearing nucellus.
- hemichordate** (hém'ikórdát) *n* [Gk. *hemis* half *chorda* string] Possessing a rudimentary notochord.
- hemicyptophyte** (hém'ikrip'tôfít) *n* [Gk. *hemis* half *cryptos* hidden *phytos* plant.] A plant with dormant buds in the soil surface the aerial shoots surviving to a season only
- hemicycle** (hém'hí'klík) *n* [Gk. *hemis* half *kyklos* round.] With some floral whorls cyclic, others spiral.
- hemelytron** —hemelytron, *pp*
- hemiepiphyt** (hém'íp'ít) *n* [Gk. *hemis* half *epi* upon *phytos* plant.] A plant whose seeds germinate on another plant but later send roots to the ground.
- hemigamy** (hémig'ámi) *n* [Gk. *hemis* half *gamos* marriage.] Activation of ovum by male nucleus without nuclear fusion *semigamy*
- hemignathous** (hémig'náthús) *n* [Gk. *hemis* half *gnathos* jaw] Having one jaw shorter than the other as in some birds.
- hemikaryon** (hém'ikár'yon) *n* [Gk. *hemis* half *karyon* kernel.] A nucleus with gametic or haploid number of chromosomes pro-nucleus.
- hemikaryotic** (hém'ikárió'tík) *n* [Gk. *hemis* half *karyon* kernel.] *Peri* hemikaryon haploid
- hemimetabolic** (hém'imétábó'tík) *n* [Gk. *hemis* half *metabole* change.] Having an incomplete or partial metamorphosis a certain insects.
- hemiparasit** (hém'ipar'ásitík) *n* [Gk. *hemis* half *paras*, beside *sis* food.] *Peri* plant which is capable of carrying on photosynthesis but not sufficiently to supply all food material.

- h mipenis** (hēm'pēnīs) *n.* [Gk. *hemí* half L. *penis* penis.] One of the paired copulatory organs in lizards and snakes.
- h mlp enstle** (hēm'tnū'nik, -pnū-) *n.* [Gk. *hemí* half *pnēin* to breathe.] With one or more pairs of spiracles closed.
- hemipterygoid** (hēm'ptēr'igōid) *n.* [Gk. *hemí* half *pteryx* wing *oides* form.] In neognath birds part of pterygoid which fuses with palatine.
- hemisaprophyte** (hēm'hāp'rōfīt) *n.* [Gk. *hemí* half *sapros* decayed *phytón*, plant.] A plant living partly by photosynthesis partly by obtaining food from humus.
- hemisom** (hēm'hōm) *n.* [Gk. *hemí* half *sōma*, body.] The symmetrical half of an animal about median vertical plane.
- hemispher** (hēm'hēr) *n.* [Gk. *hemí* half *sphaîra* globe.] One of the cerebral or cerebellar hemispheres.
- hemisystol** (hēm'hēr'stōl) *n.* [Gk. *hemí* half *syn* with *stōlos* to set.] Contraction of one ventricle of the heart.
- hemitropous** (hēm'trōpūs) *n.* [Gk. *hemí* half *trope* turn.] Turned half round, having an ovule with hilum on one side and micropyle, etc. opposite in plane parallel to placenta.
- h mixis** (hēm'kīs) *n.* [Gk. *hemí* half *mixis* mingling.] Fragmentation and reorganisation of macronucleus without involving micronucleus, in *Paramecium*.
- h mixygous** (hēm'kīgūs) *n.* [Gk. *hemí* half *syn* yok.] *Appl.* genes in haploid organisms *appl.* genes without alleles in normal diploid organisms haploxygous.
- h mo-**—*see* haemo-
- Henle's layer** [*F G J Henle* German anatomist]. Outermost stratum of nucleated cubical cells in inner root-sheath of hair follicle.
- Henle's loop**,—loop of kidney tubule within apical portion of pyramid.
- Henl sheath**,—permeurium or its

prolongation surrounding branches of nerve.

- H nsen's lin** [*V Hensen* German histologist] A disc dividing the darker portion of sarcomere into two parts macrophragma, Q line.
- H nsen od**—the primitive node *q.v.*
- Hensen stripe**—a band of interlacing fibrils on under surface of tectorial membrane of Corti organ.
- hepar** (hē'pār) *n.* [Gk. *hepar* liver] Liver or an organ having a similar function.
- heparia** (hē'pārta) *n.* [Gk. *hepar* liver] S bodies present in liver and some other tissues which inhibit formation or action, of thrombin.
- h patio** (hēpāt'ik) *n.* [Gk. *hepar* liver] *Part.* like or associated with the liver; *part.* liverworts.
- hepatocell** (hēp'ātōkōl'ik) *n.* [Gk. *hepar* liver *celon* large intestine.] *Part.* liver and colon.
- hepatocysti** (hēp'ātōkōl'ik) *n.* [Gk. *hepar* liver *kystis* bladder] *Part.* liver and gall-bladder.
- hepatoduod nal** (hēp'ātōdū'ōd'ē'nāl) *n.* [Gk. *hepar* liver; L. *duodeni* twelve each.] *Part.* liver and duodenum.
- hepatointeri** (hēp'ātōēntēr'ik) *n.* [Gk. *hepar* liver *enteron*, gut.] Of or *part.* liver and intestine.
- hepatogastric** (hēp'ātōgā'strik) *n.* [Gk. *hepar* liver *gaster* stomach.] *Part.* liver and stomach.
- hepatopantreas**,—digestive gland in many invertebrates, supposed to perform a function similar to that of liver and of pancreas in higher forms.
- h patoportal** (hēp'ātōpōr'tāl) *n.* [Gk. *hepar* liver L. *porta*, gate.] *Part.* or designating portal circulation of liver.
- hepator nal** (hēp'ātōr's nāl) *n.* [Gk. *hepar* liver; L. *renes* kidneys] *Part.* liver and kidney.
- hepatumbilical** (hēp'ātōmbil'ikāl) *n.* [Gk. *hepar* liver L. *umbilicus* navel.] Joining liver and umbilicus.

- heptagynous (hépul'ŷ ō) *n*. [Gk. *hepta* seven *gynē* female] With seven pistils.
- heptamerous (hépulm éras) *n*. [Gk. *hepta*, seven *meros* part.] Having whorls of flowers in sevens.
- heptandrous (hépuln drās) *n*. [Gk. *hepta* seven *aner* man.] Having seven stamens.
- heptarch (hép'tark) *n*. [Gk. *hepta* seven *archē* begun *g*] Having seven initial groups of xylem.
- hptastichous (hépulstikūs) *n*. [Gk. *hepta* seven *stichos* row] Arranged in seven rows *oppl* leaves.
- he b (hərb) *n*. [M.E. *herbe*] A seed plant without woody stem.
- herbaceous (hərbā shūs) *n*. [L. *herbacus* grassy] Part or resembling herb or similarly formed.
- Herbat's corpuscle [E.F. Herbat German anatomist]. A simple type of Pacinian corpuscle in herba.
- hercogamy (hərbō'gāmī) *n*. [Gk. *herkos* barrier *gamos* union.] The condition in which self-fertilization is impossible also herkogamy.
- hereditary (hərbéd'itārī) *n*. [L. *hereditas* bequeath.] Transmissible from parent to offspring as characteristics, physical or mental.
- heredity (hərbéd'itū) *n*. [L. *hereditas* bequeath.] The organic relation between successive generations germinal constitution.
- hermaphrodite (hěrmāf'rōdīt) *n*. [Gk. *hermaphroditēs* combining both sexes.] An organism with both male and female reproductive organs. *n* Hermaphroditic.
- hermaphroditism (hěrmāf'rōdītizm) *n*. [Gk. *hermaphroditēs* combining both sexes.] The condition of having both male and female reproductive organs in one individual.
- herpetology (hěrp'etōl'ōj) *n*. [Gk. *herpeton* reptile *logos* discourse.] That part of zoology dealing with the structure habits and classification of reptiles.
- hesperidium (hěs'pērīd'itūm) *n*. [Gk. *Hesperides* sisters guarding the golden apples given by Gaia.] A superior many-celled few-seeded indehiscent fruit having epicarp and mesocarp joined together and endocarp projecting into interior as membranous partitions which divide the pulp into chambers. *Eg* orange.
- heteracanthous (hēt érakān'thūs) *n*. [Gk. *heteros* other *akantis* spine.] Having the spines in dorsal fin asymmetrical.
- heteractinal (hēt érak'tināl) *n*. [Gk. *heteros* other *aktis* ray] Port nail-like spicules having disc of six to eight rays in one plane and a stout ray at right angles to these.
- heterandrous (hēt éran'trūs) *n*. [Gk. *heteros* other *aner* man.] With stamens of different length or shape.
- heterauxesis (hēt érokē'sis) *n*. [Gk. *heteros* other *auxesis* growth.] Irregular or asymmetrical growth of organs relative growth rate of parts of an organism heterogonic allometric growth bradyaesthesia and tachyauresis, *p. 8*
- heterauxin, —heterauxin, *p. 8*
- heteraxial (hēt érak'siāl) *n*. [Gk. *heteros* other *axis* axis.] With three unequal axes.
- heteroagglutinin (hēt érob'glōt'inin) *n*. [Gk. *heteros* other L. *agglutino* to glue to.] Ferulase or agglutinin of eggs which reacts on perm of different species of isoagglutinin.
- heterauxin (hēt érok'sin) *n*. [Gk. *heteros* other *auxis* to grow.] A growth-promoting hormone extracted from fungi heterauxin  $\beta$ -indolyl-acetic acid  $C_{12}H_{19}O_3N$
- heteroblastic (hēt érob'lāstik) *n*. [Gk. *heteros* other *blastos* bud.] With indirect development.
- heterobrachial (hēt'érob'rā'kiāl) *n*. [Gk. *heter* other L. *brachium* arm] Part chromosome arms on either side of centromere pericentric.
- heterocarpous (hēt'érokār'pōs) *n*. [Gk. *heteros* other *karpos* fruit.] Bearing two distinct types of fruit.

**heterocellular** (hét'érókél'súlár) *a.* [Gk. *heteros* other L. *cellula* small cell.] Composed of cells of more than one type. *Opp* homocellular.

**heterocephalous** (hét'éróké'fálús, -élf) *a.* [Gk. *heteros* other *kephale* head.] Having pedicellate flowers on separate heads from staminate.

**heterocercal** (hét'érókér'kál) *a.* [Gk. *heteros* other *karkas* tall.] Having vertebral column terminating in upper lobe of caudal fin which is usually larger than lower

**heterocercy** (hét'érókér'sí) *n.* [Gk. *heteros* other *karkas* tail.] Condition of having heterocercal tail.

**heterochlamydeous** (hét'érókhlámí'déús) *a.* [Gk. *heteros* other *chlamys* cloak.] Having calyx differing from corolla in colour texture etc.

**heterochromati** (hét'érókhrómá'tík) *a.* [Gk. *heteros* other *chroma*, colour.] *Part* heterochromatin *appl* chromosomal regions that become heteropycnotic. *Opp* euchromatic.

**heterochromatin** (hét'érókhrómá'tín) *n.* [Gk. *heteros* other *chroma*, colour.] Chromatin retaining high nucleic acid content and regulating nucleic acid metabolism in nucleus and cytoplasm.

**heterochromatism** (hét'érókhrómá'tizm) *n.* [Gk. *heteros* other *chroma* colour.] Change of colour as seasonal colour change in an inflorescence

**heterochromaty** — differential staining

**heterochromia** (hét'érókhróm'íá) *n.* [Gk. *heteros* other *chroma* colour.] Difference in colour of parts normally of one colour as of iris of pair of eyes

**heterochromosome** (hét'érókhrómós'm) *n.* [Gk. *heteros* other *chroma* colour *soma* body.] A chromosome other than an ordinary or typical one sex-chromosome allochromic. *Opp* autosome euchromosome.

**het rochromous** (hét'érókhróm'ús) *a.* [Gk. *heteros* other *chroma* colour.] Having disc and marginal florets differently coloured.

**heterochronism** (hét'érókhrónizm) *n.* [Gk. *heteros* other *chronos* time.] Departure from typical sequence in time of formation of organs

**heterochromy** (hét'érókhróm'íá) *n.* [Gk. *heteros* other; *chroma* colouring.] Abnormal coloration.

**heterocellous** (hét'érókél'mús) *a.* [Gk. *heteros* other *kléus* bed.] Heterocephalous, *q.v.*

**heterocoelous** (hét'éróké'ús) *a.* [Gk. *heteros* other *kele* hollow.] *Part* vertebrae with saddle-shaped articular centra concavoconvex.

**heterocysts** (hét'érókést's) *n. pl.* [Gk. *heteros* other *kystis* bladder.] Cells occurring at intervals on filaments of certain algae, marking limits of homocysts.

**heterodactylous** (hét'érókák'tíús) *a.* [Gk. *heteros* other *daktylos* digit.] With the first and second toes turned backwards.

**heterodont** (hét'éródónt) *a.* [Gk. *heteros* other *odous* tooth.] Having the teeth differentiated for various purposes. *Opp* homodont.

**heterodromous** (hét'éród'rómús) *a.* [Gk. *heteros* other *dromos* to run.] Having genetic spiral of stem leaves turning in different direction to that of branch leaves.

**heteroecious** (hét'érék'íús) *a.* [Gk. *heteros* other *oikos* home.] Passing different stages of life history in different hosts exhibiting heterochrom metoecious metoxenous.

**heterogamete** (hét'érógám'ít) *n.* [Gk. *heteros* other *gameteis* spouse.] One of dissimilar conjugating gametes an anisogamete

**heterogametite** (hét'érógám'ít'ík) *a.* [Gk. *heteros* other *gameteis* spouse.] Elaborating two kinds of gametes in equal numbers having unequal pair of sex chromosomes, XY or WZ *appl* sex that is heterozygous reproducing sexually di-gametic of homogametic.

**heterogamous** (hét'érög'ámós) *n* [Gk. *heteros* other *gamos* marriage] With unlike gametes having 1 or types of flowers having indirect pollination methods.

**heterogamy** (hét'érög'ámós) *n* [Gk. *heteros* other *gamos* offspring] Alternation of two sexual generations, one being true sexual the other parthenogenetic condition of having or union of gametes of different size and structure anisogamy

**heterogangliat** (hét'érög'áng'gílls) *n*. [Gk. *heteros* other *ganglion* ganglion.] With widely separated and asymmetrically placed nerve-ganglia.

**heterogenesis** (hét'érög'én'sis) *n* [Gk. *heteros* other *genesis* descent.] Spontaneous generation alternation of generations.

**heterogenetic** (hét'érög'én'tík) *n* [Gk. *heteros* other *genesis* descent.] Descended from different ancestral stock *per* heterogenesis.

**heterogeny** (hét'érög'én) *n* [Gk. *heteros* other *gamos* generation] Having several distinct generations succeeding one another in a regular series.

**heterogon** (hét'érög'ón'tík) *n*. [Gk. *heteros* other *gonos* produce.] Differing in developmental or growth rate allometric.

**heterogonous** (hét'érög'ón's) *n*. [Gk. *heteros* other *gonos* birth.] *Per* heterogenesis or heterogeny

**heterogony** (hét'érög'ón) *n*. [Gk. *heteros* other *gonos* birth.] Condition of having two or three kinds of flowers differing in length of stamen alternation / generations allometry *p.p*

**heterogynous** (hét'érög'ín's) *n*. [Gk. *heteros* other *gyn* woman.] With two types of females.

**heterokaryon** (hét'érókár'íon) *n* [Gk. *heteros* other *karyon* nucleus] An individual having heterokaryotic cells.

**heterokaryosis** (hét'érókár'íó'sis) *n* [Gk. *heteros* other *karyon* nucleus] Presence of genetically dissimilar nuclei within individual cells heterokaryotic condition.

**heterokaryote** (hét'érókár'íó) *n*. [Gk. *heteros* other *karyon* nucleus.]

Having two distinct types of nuclei

**heterokaryotic** (hét'érókár'íó'tík) *n*. [Gk. *heteros* other *karyon* nucleus.] Having genetically dissimilar nuclei, in multinucleate cell or in different cells of a hypha heterokaryote.

**heterokinesis** (hét'érókín'sis) *n* [Gk. *heteros* other *kinesis* to move.] Qualitative or differential division of chromosomes.

**heterolecithal** (hét'érólé'thál) *n*. [Gk. *heteros* other *lekithos* yolk.] Having unequally distributed decaplasta.

**heterologous** (hét'éról'óg's) *n*. [Gk. *heteros* other *logos* relation.] Of different origin derived from different species *appl* various substances & agglutinins, affecting other than species of origin / homologous.

**heterology** (hét'éról'óg) *n*. [Gk. *heteros* other *logos* relation.] Non-correspondence of parts owing to different origin or different elements.

**heteromallous** (hét'érómál'ús) *n*. [Gk. *heteros* other *malleus* lock of wool.] Spreading in different directions.

**heteromastigote** (hét'érómást'ígál) *n*. [Gk. *heteros* other *mastix* lash.] Having two different types of flagella heteromastigote.

**heteromeros** (hét'érómér'ús) *n*. [Gk. *heteros* other *meros* part.] Having or consisting of an unequal number of parts, *appl* whorls, tentacles etc. having stratified thallus.

**heterometabolic** (hét'érómétáb'ól'tík) *n*. [Gk. *heteros* other *metabolé* change] Having incomplete metamorphosis.

**heteromorph** (hét'érómór'fík) *n*. [Gk. *heteros* other *morphe* shape.] Having different forms at different times *appl* chromosomes of different size and shape, or chromosome pairs differing in size *appl* alternation of diploid and haploid phases in morphologically dissimilar generations, aneuploidy.

**heteromorphism** (hét'éróm'fizm) *n*. [Gk. *heteros* other *morphe* shape.] The state or quality of being heteromorphic.

**heteromorphosis** (hét'érómór'fósis) *n*. [Gk. *heteros* other *morphe* shaping] Production of part in an abnormal position; regeneration, when the new part is different from that removed of homocosis.

**heteromorphous** (hét'érómór'fús) *a*. [Gk. *heteros* other *morphe* shape.] Part an irregular structure or departure from the normal.

**heteroereta** (hét'éróm'érta) *n*. [Gk. *heteros* other *Nereis* Nereid.] A free-swimming dimorphic sexual stage of Nereis and other marine worms.

**hete onomous** (hét'érón'ónús) *a*. [Gk. *heteros* other *nomos* law] Subject to different laws of growth specialized on different lines. [Gk. *heteros* other *nomos* department.] *Appl.* segmentation into dissimilar segments.

**hete opelmous** (hét'érópél'mús) *a*. [Gk. *heteros* other *pelos* sole of foot.] Having flexor tendons of toes bifid.

**heter petalous** (hét'érópét'álos) *a*. [Gk. *heteros* other *petalon* petal] With dissimilar petals.

**heterophagous** (hét'éróf'ágús) *a*. [Gk. *heteros* other *phagos* to eat.] Having young in altricial condition.

**heterophil** (hét'érófil) *a*. [Gk. *heteros* other *philes* loving] *Appl.* non-specific antigens and antibodies present in an organism affording natural immunity *appt.* granular leucocytes which show interspecific differences in their reaction to stains. *n* Polymorpho-nuclear leucocytes.

**hete phydic** (hét'érófil'dík) *a*. [Gk. *heteros* other *phyes* shoot.] Producing separate shoots, one vegetative one reproductive.

**heter phyllous** (hét'érófil'ús) *a*. [Gk. *heteros* other *phylon* leaf.] Bearing foliage leaves of different shape on different parts of the same plant

**hete ophytic** (hét'éróft'ík) *a*. [Gk. *heteros* other *phyton* plant.] With two kinds of spores, borne by different sporophytes of homophytic.

**heteroplasia** (hét'éróplás'ia) *n*. [Gk. *heteros* other *plastis* to mould.] The development of one tissue from another of a different kind.

**heteroplasma** (hét'érópláz'm) *n*. [Gk. *heteros* other *plasma* mould.] Tissue formed in abnormal places.

**hete oplasma** (hét'érópláz'm) *n*. [Gk. *heteros* other *plasma* mould.] Plasma from a different species used as a medium for tissue culture of autoplasmia, homoplasmia.

**hete oplasti** (hét'éróplás'tík) *a*. [Gk. *heteros* other *plastis* formed.] *Appl.* grafts of unrelated maternal *appt.* transplantation between individuals of different species or genera, *appt.* homologoplastic of xenoplastic.

**heteroploid** (hét'éróplóid) *a*. [Gk. *heteros* other *haplos* onefold.] Having an extra chromosome through non-disjunction of a pair in meiosis not having a multiple of the basic haploid number of chromosomes. *n* An organism having heteroploid nuclei.

**heteroprotease** (hét'éróprótéás) *n*. [Gk. *heteros* other *protes* first.] One of primary products formed by action of gastric juices on other hydrolyzing agents on proteins proteopeptone.

**heteropycnosis** (hét'érópfík'nó'sis) *n*. [Gk. *heteros* other *pykna* dense.] Condensation of sex-chromosome during growth period stages of gonia and cytos condensation of chromosome region or of chromosomes evoluting more or less nucleic acid than remainder of chromosome set.

**hete opycnotic** (hét'érópfík'nós'ík) *a*. [Gk. *heteros* other *pykna* dense] *Appt.* chromosome manifesting heteropycnosis.

**heterorhizal** (hét'érórf'íz'al) *a*. [Gk. *heteros* other *rhiza* root.] With roots coming from no determinate point.



- heterosexual** (hét'éròék' sál) *n* [Gk. *heteros* other *L. sexus* sex.] Of or *pert* the opposite sex *appl* hormones, etc.
- heterosis** (hét'érò'sis) *n* [Gk. *heteros* other] Cross-fertilisation hybrid vigour result of heterozygous
- heterosomal** (hét'érò's mál) *n* [Gk. *heteros* other *some, body*] Occurring in, or *pert* different bodies *appl* rearrangements in two or more chromosomes of a set.
- heter some** (hét'érò'sóm) *n*. [Gk. *heteros* other *some body*] A heterochromosome.
- heterosporangic** (hét'érò'spòr'ík) *n* [Gk. *heteros* other *speros* seed *appon* vowel] Bearing two kinds of spores in separat sporangia.
- heterosporous** (hét'érò'spòr'is, hét'érò'spò'r'is) *n*. [Gk. *heteros* other *speros* seed.] Producing two kinds of spores heterosporic.
- heterosporous** (hét'érò'spòr'is) *n* [Gk. *heteros* other *speros* seed.] The condition of being heterosporous the production of megaspores and microspores.
- heterostemonous** (hét'érò'stém'ón's) *n*. [Gk. *heteros* other *stemon* stamen] With unlike stamens.
- heterostrophy** (hét'érò'stròf'is) *n* [Gk. *heteros* other *strophos* turning] The condition of being coiled in a direction opposite to normal.
- heterostyled** (hét'érò'stí'd) *n*. [Gk. *heteros* other *stylos* pillar] Having unlike or unequal styles heterostylic.
- heterostyly** (hét'érò'stí'l'is) *n*. [Gk. *heteros* other *stylos* pillar] Condition of being heterostyled.
- heterosynapsis** (hét'érò'sín'áps'is) *n* [Gk. *heteros* other *synapsis* union.] Pairing of two dissimilar chromosomes of homosynapsis.
- heterotaxis** (hét'érò'ták'sis) *n* [Gk. *heteros* other *taxis* arrangement] Abnormal or unusual arrangement of organs or parts.
- heterothalli** (hét'érò'thá'l'is) *n* [Gk. *heteros* other *thallos* young shoot.] Requiring branches of distinct mycelia to form a syngonium *appl* mould of homothallic.
- hetero the** (hét'érò'th'is) *n* [Gk. *heteros* other] *Pert* heterosis *appl* vigor
- heter tomy** (hét'érò'tóm'is) *n*. [Gk. *heteros* other *temno* to cut.] Condition of having parts of perianth whorls unequal or dissimilar irregular dichotomy in Crinoidra.
- heterotopy** (hét'érò'tóp'is) *n*. [Gk. *heteros* other *topos* place.] Displacement abnormal habitat.
- heterotrichous** (hét'érò'trík'ús) *n*. [Gk. *heteros* other *trichos* hair] Having two types of cilia having thallus consisting of prostrate and erect filaments, as certain algae.
- heterotrophic** (hét'érò'tróf'ík) *n* [Gk. *heteros* other *trophos* nourishment.] Getting nourishment from organic substances *appl* parasitic plants *appl* autotrophic.
- heterotropic chromosome** — sex chromosome *q* *q*
- heterotropous** (hét'érò'tróp'ús) *n* [Gk. *heteros* other *trepein* to turn.] *Pert* ovule with hilum and micropyle at opposite ends in plane parallel to placenta heterotropous.
- heterotype** (hét'érò'típ) *n* [Gk. *heteros* other *typos* pattern.] First meiotic division.
- heterotypy** (hét'érò'típ'is) *n*. [Gk. *heteros* other *typos* pattern.] *Pert* mitotic division in which daughter chromosomes remain united and form rings *appl* first or reduction division in meiosis of homeotypic
- hetero typical** (hét'érò'típ'ík'ál) *n*. [Gk. *heteros* other *typos* pattern.] *Appl* genes comprising species that are not truly related.
- hetero xanous** (hét'érò'sán'ús) *n*. [Gk. *heteros* other *xanous* host.] Occurring on or infesting more than one kind of host heteroecious.
- heterozygous** (hét'érò'síg'ús) *n* [Gk. *heteros* other *zygon* yoke.] Descent from two different species, varieties, or races.

het rosygota (hët'ërsü'göt) *n* [Gk. *heteros* other *sygos* yoke.] A ryanium having alternath f runs of gene an impure dominant heterozygous organism.

heterozygous (hët'ërsü'güt) *a*. [Gk. *heteros* other *sygos* yoke.] Bearing two diastolla alternative genetical factors.

hexacanth (hëk'sikänth) *a*. [Gk. *hex* six *akantha*, thorn.] Having six hooks *appl.* embryo of certain flat worms.

hexactinal (hëk'sik'tinäl) *a*. [Gk. *hex* six *aktis* ray.] With six rays.

hexactine (hëk'sik'tin) *n*. [Gk. *hex* six *aktis* ray.] A spicule with six equal and similar rays meeting at right angles.

h. nactician (hëk'sik'tin'ian) *a*. [Gk. *hex* six *aktis* ray.] With tentacles or pementaries in multiples of six.

hexacyell (hëk'sik'sik) *a*. [Gk. *hex* six *kyklos* circle.] Having floral whorls consisting of six parts.

hexagynous (hëk'sik'gin) *a*. [Gk. *hex* six *gyn* woman.] Having six postils.

hexamerous (hëk'sik'mërs) *a*. [Gk. *hex* six *meros* part.] Occurring in series arranged in sixes.

hexandrous (hëk'sik'än'dris) *a*. [Gk. *hex* six *andros* man.] Having six stamens.

hexapetaloid (hëk'sik'pët'aloid) *a*. [Gk. *hex* six *petalon* petal *oides* form.] With petaloid perianth of six parts.

hexapetalous (hëk'sik'pët'alös) *a*. [Gk. *hex* six *petalon* petal.] Having six petals.

hexaphyllous (hëk'sik'fil'ös) [Gk. *hex* six *phyllos* leaf.] Having six leaves.

h. xaploid (hëk'sik'plöid) *a*. [Gk. *hex* six *xaplos* simple *oides* form.] With six sets of chromosomes. *n*. An organism having six times the monoploid chromosome number.

hexapod (hëk'sik'pöd) [Gk. *hex* six *pod* foot.] *Part* animal with six legs. An insect.

h. pterous (hëk'sik'pët'üs) *a*. [Gk. *hex* six *pteron* wing.] Having six wing-like processes or expansons.

hexarch (hëk'sä'rk) *a*. [Gk. *hex* six *arche* beginning.] Having six radiating vascular strands *appl.* roots.

hexasepalous (hëk'sik'sep'alös) *a*. [Gk. *hex* six *sepalon* sepal.] Having six sepals.

hexaspermous (hëk'sik'spër'müs) *a*. [Gk. *hex* six *sperma* seed.] Having six seeds.

hexastemonous (hëk'sik'stëm'önös) *a*. [Gk. *hex* six *stemon* stamen.] Having six stamens hexandrous.

h. xasta (hëk'sik'stër) *n*. [Gk. *hex* six *aster* star.] A variety of hexactine in which the rays branch and produce star-shaped figures.

hexastichous (hëk'sik'stich'üs) *a*. [Gk. *hex* six *stichos* row.] Having the parts arranged in six rows.

hexicology (hëk'sik'öl'öj) *n*. [Gk. *hexis* habit *logos* discourse.] Bioonomica.

hexuronic acid—ascorbic acid or vitamin C.

hi tas (hik'täs) *n*. [L. *hiare* to gape.] Any large opening.

hibernacul in (hik'bërnäk'ülün) *n*. [L. *hibernaculum* winter-quarters.] A winter bed specially modified winter bed in fresh-water Polyaon.

hibernate (hik'bërnäk) [L. *hibernus* wintry.] To pass the winter in resting state.

hibernating glands,—lymph glands of richly vascularized fatty tissue occurring in some rodents and insectivores.

hidrosis (hidrö'sis) *n*. [Gk. *hidros* sweat.] Excretion of sweat per spiration.

hi mal (hik'mäl) *a*. [L. *hiems* winter.] *Part* winter *appl.* aspect of community.

Highmor antrum [? *Highmore* English surgeon]. The maxillary sinus which communicates with the middle meatus of the nose.

Highmore's body—corpus highmoreanum medullarium testis.

**hilifer** us (hîl'fērōs) *n* [*L. hilum* in the *ferre* to carry] *H* v-ing  
hilum

**hilum** (hî'lŭm) *n*. [*L. hilum* in the] Scar on ovule where it was attached to placenta eye of seed nucleus of starch grain small notch opening or depression usually where vessels nerves etc. enter of kidney lung pleura etc. also hilus.

**hind brain**,—rhombencephalon that portion of brain derived from third embryonic vesicle

**hind gut**,—diverticulum of yolk-sac extending into tail-fold in human embryo posterior portion of alimentary tract.

**hinge-cells**,—large epidermal cells which, by changes in turgor control rolling and unrolling of leaf.

**hinge-joint**,—a joint in which articulatory surfaces are so moulded as to permit motion in one plane only ginglymus.

**hinge-ligament**,—the tough elastic substance joining the two valves of a bivalve shell.

**hinge-line**,—the line of articulation of the two valves in a bivalve shell.

**hinge-tooth**,—one of the projections found on the hinge-line in bivalves.

**hip-joint**,—the ball-and-socket joint between femur and hip-girdle.

**hippocampal** (hîp'okām pāl) *a*. [*Gk. hippos* horse *kampē* bend.] Part of the hippocampus.

**hippocampus** (hîp'ōkām pūs) *n* [*Gk. hippos* horse *kampē* bend] Part of rhombencephalon forming an eminence extending throughout length of floor of inferior cornu of lateral ventricle.

**hippuric** (hîp'ŭr'ik) *a*. [*Gk. hippos* horse *ouron* urine] Obtained from horse's urine *appl* acid synthesised by kidney and present in urine of herbivorous animals

**hirsute** (hîr'sŭt') *a* [*L. hirsutus* hairy] Covered with hair-like feathers, *appl* birds having stiff hairy bristles or covering

**hirudin** (hîr'ŭd'ĭn) *n* [*L. hirudo* leech] A substance obtained in solution from buccal glands of leech, which prevents clotting of blood by inhibiting action of thrombin on fibrinogen.

**His bundle** [*H*] *His* German anatomist]. Band of muscle fibres, with nerve fibres connecting auricles and ventricles of heart atrioventricular or auriculoventricular bundle Gask II's bridge.

**hispid** (hîs'pĭd) *a*. [*L. hispida* rough.] Having stiff hairs, spines, or bristles.

**histamin** (hîs'tĭmĭn) *n* [*Gk. histos* tissue *ammonios* resinous gum.] Product of the basic amino acid and food constituent histidine, in ergot and animal tissues, stimulates autonomic nervous system gastric juice secretion, and capillary dilatation  $C_8H_9N_3$ .

**histiocyte** (hîs'tĭōs'it) *n*. [*Gk. histos* tissue *kytos* hollow] A primitive blood cell giving rise to a monocyte a monocyte of reticular origin or a clasmatocyte derived from endothelium, a reticulo-endothelial cell fixed macrophage in loose connective tissue *diversities* cell *rhagocric* cell

**histiomonocyte** (hîs'tōmōn'ōs'it) *n*. [*Gk. histos* tissue *monos* alone *kytos* hollow] A endothelial cell of certain capillaries and associated with the histiocyte metabolic system.

**histiotypic** (hîs'ŭd'ĭp'tĭk) *a*. [*Gk. histos* tissue *typos* pattern.] *Appl* uncontrolled or unorganised growth of cells in tissue culture *Opp* organotypic.

**histoblast** (hîs'tōblāst) *n*. [*Gk. histos* tissue *blastos* bud.] A unit of tissue imaginal disc.

**histochemistry** (hîs'tōkĕm'ĭstrĭ) *n* [*Gk. histos* tissue *chemia*, transmutation.] The chemistry of animal tissues

**histocyte** (hîs'tōs'it) *n* [*Gk. histos* tissue *kytos* hollow] Tissue cell as distinguished from germ cell.

**histogenesis** (hîs'tôjên'êsh) *n.* [Gk. *hîstos* tissue *genesis* descent.] For-  
mation and development of tissue.

**histogeni** (hîs'tôjên'tik) *n.* [Gk. *hîstos* tissue *genes* producing.]  
Thsu-producing *appl.* the separate  
merematic layers in stratified  
growing point.

**histogens** (hîs'tôjêns) *n. plu.* [Gk. *hîstos* tissue *genesis*, to pro-  
duce.] Thsuo-producing zones or  
layers: periblastema, periblastema, derma-  
togen, and calyptrogen.

**histohaematin** (hîs'tôbê'm'âtin) *n.*  
[Gk. *hîstos* tissue *haema* blood.]  
An intracellular haemin compound  
cytochrome.

**histology** (hîstô'lôj) *n.* [Gk. *hîstos*  
tissue *logos* discourse.] The  
science which treats of the detailed  
structure of animal or plant tissues  
microscopic morphology histo-  
morphology

**histolysis** (hîstô'lô'sis) *n.* [Gk. *hîstos*  
tissue *lysis* to dissolve.] The  
dissolution of organic tissues pro-  
cess by which most of pupal internal  
organs dissolve into creamy fluid  
except certain cells round which  
new imaginal tissues are formed.

**histone** (hîs'tôn) *n.* [Gk. *hîstos*  
tissue.] A protein constituent of  
cell nuclei, thymus, blood cor-  
puscles, and lymph glands.

**histophyly** (hîstôf'îl) *n.* [Gk. *hîstos*  
tissue *phylê* tribe.] Phylogenetic  
history of group of cells.

**histotaleoids** (hîs'tô'têl'ôids) *n.* [Gk.  
*hîstos* tissue *talês* full-grown.]  
The completion of functional differ-  
entiation of tissue cells.

**histotrophyl** (hîs'tôtrôf'îk) *n.* [Gk.  
*hîstos* tissue *trophêlos*, to nourish.]  
*Part.* or connected with tissue for  
nutrition or repair

**histoxol** (hîs'tôks'îk) *n.* [Gk. *hîstos*  
tissue *oxos* animal.] Living with-  
in tissues *appl.* trophoblastic stage  
of certain liposarcoma.

**histoxym** (hîs'tôks'im) *n.* [Gk. *hîstos*  
tissue *xym* leaven.] An enzyme  
found in kidneys of certain animals,  
capable of decomposing hippuric  
acid.

**hock** (hök) *n.* [A.S. *hock*, heel.]  
The tarsal joint or its region;  
hough.

**holandric** (hölän'drik) *n.* [Gk. *holos*  
whole *aner* male.] *Part.* holandry  
transmitted from male to male  
through the Y-chromosome *appl.*  
sex linked characters.

**holandry** (hölän'dri) *n.* [Gk. *holos*  
whole *aner*, male.] The condition  
of having full number of testes, as  
two pairs in *Oligochaeta* of  
microandry

**holarecti** (hölär'êkt'îk) *n.* [Gk. *holos*  
whole *Aktos* Great Bear] *Appl.*  
or *part.* zoogeographical region  
including northern parts of the Old  
and New Worlds or palaearctic  
and nearctic sub-regions, *q.v.*

**holard** (hölärd') *n.* [Gk. *holos*  
whole *ardê* I water.] Total water  
content of soil of downward, orchard.

**holaspidous** (höl'äspid'êsh) *n.* [Gk.  
*holos* whole *aspis* shield.] With  
single series of large scales on pos-  
terior aspect of tarso-metatarsus.

**holocodont** (höl'kôdônt) *n.* [Gk.  
*holos* furrow; *odontos* tooth.] Hav-  
ing the teeth in long continuous  
groove.

**holdfast**,—the sucker or disc on the  
thallus of certain algae hapteron.

**holobasidium** (höl'ôbäsid'îd'îm) *n.*  
[Gk. *holos* whole *basis* base;  
*basidium* dim.] A basidium not  
divided by septa.

**holobenthic** (höl'bênth'îk) *n.* [Gk.  
*holos*, whole *benthos* depths.]  
Living in depths of sea throughout  
life.

**holoblastic** (höl'blläst'îk) *n.* [Gk.  
*holos* whole *blastê* bud.] *Part.*  
eggs with total cleavage.

**holobranch** (höl'ôbrä'ngk) *n.* [Gk.  
*holos* whole; *branchia*, gills.] A  
gill in which gill filaments are  
borne on both sides.

**holocarpic** (höl'kär'pîk) *n.* [Gk.  
*hol* whole *karpos* fruit.] *Appl.*  
fungi without rhizoids or haustoria,  
living in host cell, as certain  
*Phycomycetes* of eucarpic.

**Holoco** (höl'ôkô) *n.* [Gk. *holos*  
whole *koimos* recent.] Recent

- geological epoch following Pleistocene postglacial age
- holochlamydate** (hól'ókliám'ýdát) *a.* [Gk. *holos* whole *chlamys* cloak.] Having no notch on mantle margin.
- holothroal** (hól'óktróál) *a.* [Gk. *holos* whole *thrus* close.] Having eyes with globular or biconvex lenses closely crowded together so that cornea is continuous over whole eye.
- holocrine** (hól'ókrlín) *a.* [Gk. *holos* whole *kraino* to separate.] *Opp* glands in which secretory cells disintegrate and form part of secretion, as sebaceous glands of apocrine merocrine
- Holocyclic** (hól'ósklík) *a.* [Gk. *holos* whole *kýklos* circle.] *Opp* or completing alternation of sexual and parthenogenetic generations.
- hologametes** (hól'ógamétis) *n. plu.* [Gk. *holos* whole *gametes* spouse.] Fully developed protozoa taking part in syngamy *Opp* merogametes.
- hologamy** (hól'óg'áms) *n.* [Gk. *holos* whole *gamos* marriage.] Microgamy condition of having gametes similar to somatic cells.
- hologastrula** (hól'ógas'tróólá) *n.* [Gk. *holos* whole *gaster* stomach.] Gastrula formed from holoblastic eggs
- holognathus** (hól'óg'náthús) *a.* [Gk. *holos* whole *gnathos* jaw.] Having the jaw in single piece.
- hologynic** (hól'ójín'ík) *a.* [Gk. *holos* whole *gyné* woman.] Transmitted direct from female to female *Opp* sex linked characters.
- holomastigote** (hól'ómástígót) *a.* [Gk. *holos* whole *mastix* whip.] Having one type of flagellum scattered evenly over the body
- holometabolic** (hól'ómétából'ík) *a.* [Gk. *holos* whole *metabolé* change.] Having complete metamorphosis.
- hol metabolism** (hól'ómétáb olízín) *n.* [Gk. *holos* whole *metabolé* change.] State of having complete metamorphosis. *Opp* hemimetabolism.
- holomorphosis** (hól'ómó'fósis) *n.* [Gk. *holos* whole *morphe* shape.] Regeneration in which the entire part is replaced.
- holonephridia**,—**meganephridia**, *q.v.*
- holonephros** (hól'ónéf'rós) *n.* [Gk. *holos* whole *nephros* kidney.] The hypothetical continuous excretory organ.
- holophyt** (hól'óft'ík) *a.* [Gk. *holos* whole *phytos* plant.] Obtaining the whole of its food after the manner of a plant phototrophic. *Opp* holozoic.
- holoplankton** (hól'ópláńktón) *n.* [Gk. *holos* whole *planktos* wandering.] The marine or fresh-water organisms which complete their life cycle while drifting with the surrounding water
- holoplanktic** (hól'ópláńktón'ík) *a.* [Gk. *holos* whole *planktos* wandering.] Living near the surface of sea, or of lake throughout life *Opp* holoplankton.
- holopneustic** (hól'ón'ústík) *a.* [Gk. *holos* whole *pnein* to breathe.] With all spiracles open for respiration.
- holoptil** (hól'óp'tík) *a.* [Gk. *holos* whole *ops* eye.] Having eyes of two sides meeting in a constricted line of union.
- holorhinal** (hól'ór'ínál) *a.* [Gk. *holos* whole *rhis* nose.] Having nares with posterior margin rounded. *Opp* schrorhinal.
- holeschiela** (hól'óskhía) *n.* [Gk. *holos* whole *schistos* to cut.] Amikosa.
- holosericeous** (hól'osérsh'ús) *a.* [Gk. *holos* whole *L.L. sericus* silken.] Completely covered with silky hairlike structures having a silky lustre or sheen.
- holostomatous** (hól'óstóm'átús) *a.* [Gk. *holos* whole *stoma* mouth.] With margin of aperture entire.
- holostyly** (hól'óst'íl) *n.* [Gk. *holos* whole *stylos* pillar.] Primitive condition of jaw suspension in some fishes.

**holosystoli** (hól'olstól'ík) *a.* [Gk. *holos* whole *systolē* contraction.] *Part.* complete systole.

**holotrichous** (hól'ót'ríkūs) *a.* [Gk. *holos* whole *trichis* hair.] Having uniform covering of cilia over the body.

**holotype** (hól'ótíp) *n.* [Gk. *holos* whole; *typos* pattern.] The single specimen chosen for designation of new species.

**holozoi** (hól'ózo'ík) *a.* [Gk. *holos* whole *zōon*, animal.] Obtaining the whole of its food after the manner of animals. Ingesting protists. *Opp.* holophytic.

**homacanth** (hóm'ákánth) *a.* [Gk. *homos* same *akanthē*, spine.] Having spines of dorsal fin symmetrical.

**homaxon** (hóm'ák'són) *a.* [Gk. *homos* same *axōn* axis.] Built up around equal axes. *hom.* axonic.

**homeo-** *also* **homoeo-** **homolo-**

**homeokinesis** (hóm'ēókinē'sis) *n.* [Gk. *homos* alike *kinesis* to move.] Mitosis with equal division of chromatinic elements to daughter nuclei.

**homeostasis** (hóm'ēós'tásis) *n.* [Gk. *homos* alike *stasis* standing.] The constancy of the internal environment of the body as in birds and mammals.

**homosynapsis**,—**homosynapsis**, *q.v.*

**homotely** (hóm'ēt'ē) *n.* [Gk. *homos* alike *telos* end.] Evolution from homologous parts, but with less close resemblance.

**homotypy** (hóm'ótíp'ík) *a.* [Gk. *homos* alike *typos* character.] *Appl.* second division in meiosis, similar to typical mitosis of heterotypic.

**homoxole** (hóm'ēós'ík) *a.* [Gk. *homos* alike *zōon* animal.] *Part.* region or series of regions with identical fauna.

**homoblasti** (hóm'ób'lást'ík) *a.* [Gk. *homos* same *blastos* bud.] Having direct embryonic development arising from similar cells.

**homobrachial** (hóm'ób'rāk'íal) *a.* [Gk. *homos* same *L. brachium*,

*arm.*] *Part.* the same chromosome arm paracentric.

**homocarpous** (hóm'ókár'pōs) *a.* [Gk. *homos* same *karpos* fruit.] Bearing one kind of fruit.

**homocellular** (hóm'osēl'úlar) *a.* [Gk. *homos* same; *L. cellularis*, small cell.] Composed of cells of one type only. *Opp.* heterocellular.

**homocercal** (hóm'ósēr'kál) *a.* [Gk. *homos* same *kerkos* tail.] Having a tail with equal or nearly equal lobes and arms ending near middle of base.

**homocer brain** (hóm'ósēr'brēn) *n.* [Gk. *homos* same *L. cerebrum*, brain.] A substance identical with cerebrum.

**homochlamydeous** (hóm'ókhlám'id'ēūs) *a.* [Gk. *homos* same *chlamys* cloak.] Having outer and inner perianth whorls alike.

**homochromous** (hóm'ókhrō'mūs) *a.* [Gk. *homos* same *chromos*, colour.] Of one colour. *Appl.* capsular florids.

**homochronous** (hóm'ók'rōn'ūs) *a.* [Gk. *homos* same *chronos* time.] Occurring at the same age or period, in successive generations.

**homodermal** (hóm'odér'mík) *a.* [Gk. *homos* same *derma*, skin.] Sprung from same embryonic layer.

**homodont** (hóm'modōnt) *a.* [Gk. *homos* same *odous* tooth.] Having the teeth all alike, not differ initiated. *Opp.* heterodont.

**homodromous** (hóm'odrōm'ūs) *a.* [Gk. *homos* same *dromos*, to run.] Having genetic spiral alike in direction in stem and branches.

**homodynamal** (hóm'ódinálm'ík) *a.* [Gk. *homos* same *dynamis* power.] Developing without resting stages. *Appl.* insects not requiring diapause for further development. *Part.* homodynamy.

**homodynamy** (hóm'ódinálm'í) *n.* [Gk. *homos* same *dynamis* power.] Metameric homology.

**homoeandrous** (hóm'ēánd'rūs) *a.* [Gk. *homos* alike *aner* male.] Having uniform stamens.

**homoeo-** *also* **homoeo-** **homolo-**

- homoeologous (hómōlōgós) *n.* [Gk. *homoiōs* like *logos* relation.] *Appl* chromosomes having in part the same sequence of genes partly homologous.
- homoeologous — *a* homoeologous chromosome.
- homoeomorphic (hómōmórphik) *a* [Gk. *homoiōs* like *morphe* form.] Resembling in shape or structure exhibiting convergence
- homoeosis (hómōsis) *n.* [Gk. *homoiōsis* likeness.] Assumption by one part of likeness to another part as modification of antenna into foot, or of petal into stamen metamorphosis
- homoeotype (hómōtíp) *n.* [Gk. *homoiōs* alike *typos* pattern.] A specimen authoritatively stated to be identical with the holotype lectotype paratypes or syntypes of a species.
- homoeozotic (hómōsótik) *a* [Gk. *homoiōs* alike *zōtē* life.] Characterised by similar forms of life *appl* areas or zones
- homogametic (hómōgāmētik) *a* [Gk. *homos* same *gametes* spouse.] Having homogametes or gametes of one type *appl* sex possessing two X-chromosomes / heterogametic, digametic.
- homogamy (hómōgāmē) *n.* [Gk. *homos* same *gamos* marriage.] Characterised by homogamy
- homogamy (hómōgāmē) *a.* [Gk. *homos* same *gamos* marriage.] Inbreeding due to some type of isolation condition of having flowers all alike, having stamens and petals mature at same time.
- homogangliat (hómōgángliat) *a.* [Gk. *homos* same *ganglion* knot.] Having ganglia of nerve loops symmetrically arranged.
- homogen (hómōgēn) *n.* [Gk. *homos* same *genos* race.] One of group having common origin one of a series of identically derived parts
- homogenesis (hómōgēnesis) *n.* [Gk. *homos* same *genesis* descent.]

The type of reproduction in which like begets like.

- homogenetic (hómōgēnetik) *a.* [Gk. *homos* same *genesis* descent.] *Peri* homogenesis *appl* pairing of homologous chromosomes.
- homogenous (hómōgēnos) *a.* [Gk. *homos* same *genos* race.] More or less alike owing to descent from common stock *appl* graft from another animal of same species.
- homogony (hómōgōnē) *n.* [Gk. *homos* same *genos* race.] Correspondence between parts due to common descent the same genotypical structure homogeneity
- homogony (hómōgōnē) *n.* [Gk. *homos* same *genos* offspring.] Condition of having one type of flower with equally long stamens and pistils
- homolo — *also* homeo- homoco-
- homodimeteron (hómōdēmētērōn) *a.* [Gk. *homoiōs* like *metron* part.] Having algae distributed equally through fungoid mycelium in lichen.
- homoplastic (hómōplástik) *a.* [Gk. *homoiōs* like *plastēs* formed.] *Appl* transplantation between individuals of the same species homeoplastic.
- homolasmoti (hómōlasmōtik) *a.* [Gk. *homoiōs* like *asma* impulse.] *Appl* organisms with constant internal osmotic pressure corhaline *p.p.*
- homothermal (hómōthērmal) *a.* [Gk. *homoiōs* like *thermos* hot.] Having a more or less constant body temperature warm-blooded homothermal homothermic homothermal homothermic homothermous.
- homotransplantall *a.* — transplantation of tissue or organ from one organism to another possibly unrelated of autotransplantation
- homotrichal (hómōtrichal) *a.* [Gk. *homos* same *trichos* yolk.] Having little deutoplasm, which is equally distributed.
- homologous (hómōlōgós) *a.* [Gk. *homologos* agreeing.] Resembling in structure and origin *appl*.

various substances & agglutinins affecting organisms of same species only *appl* chromosomes with the same sequence of genes *appl* genes determining the same character & eye colour *cf* heterologous, antithetic.

**homologous** (hóm'ólóg) *n* [Gk. *homologos* agreeing] One of a series of structures similar in structure and origin a homologous gene.

**homology** (hóm'ól'ógí) *n*. [Gk. *homologos*, agreement.] Similarity in structure and development of organ or parts.

**homomallous** (hóm'ómál'ús) *n*. [Gk. *homos* same *malleo* lock of wool.] Carving uniformly *in* one side *appl* leaves.

**homomorphic** (hóm'ómór'fík) *n* [Gk. *homos* same *morphe* form.] Of similar size or structure *part* or exhibiting homomorphism *appl* chromosome pairs *cf* heteromorphic.

**homomorphism** (hóm'ómór'fízis) *n* [Gk. *homos* same *morphe* shape.] The condition of having perfect flowers of only one type hemimetabolism similarity of larva and adult.

**homomorphosis** (hóm'ómór'fósis) *n* [Gk. *homos* same *morphosis* shaping] Condition of having a newly regenerated part like the part removed.

**homonomous** (hó'mónóm'ík) *n* [Gk. *homos* same *nomos* law] Having the same behaviour *appl* affinity as of theros combining *cf* vascular anastomoses or complementary affinity as in adrenal medulla and cortex homonomous.

**homonomous** (hómón'ómós) *n*. [Gk. *homos* same *nomos* department] *Appl* segmentation into similar segments. [Gk. *nomos* law] Following same stages or process as of development or growth.

**homonymy** (hómón'ómí) *n*. [Gk. *homos* same *onymos* law] The homology existing between parts

arranged on transverse axis  
homodynamy

**homonym** (hóm'óním) *n* [Gk. *homos* same *onymos* name.] A name preoccupied, and therefore unsuitable according to law of priority  
**homopetalous** (hóm'ópét'alús) *n*. [Gk. *homos* same *petalos* petal.] Having all the petals alike.

**homophyad** (hóm'ófíád'ík) *n* [Gk. *homos* same *physis* shoot.] Producing only one kind of shoot

**homophyll** (hóm'ófí'ík) *n*. [Gk. *homos* same *phyllos* leaf.] Resembling one another owing to a common ancestry

**homophyllous** (hóm'ófí'ús) *n* [Gk. *homos* same *phyllos* leaf.] Bearing leaves all of one kind.

**homophytic** (hóm'ófí'tík) *n*. [Gk. *homos* same *phytos* plant.] With two kinds of spores, or one bisexual type, borne by a single sporophyte *cf* heterophytic.

**homoplasma** (hóm'ópíás'má) *n* [Gk. *homos* same *plasma*, mould] Plasma from another animal of same species used as a medium for tissue culture *cf* autoplasma, heteroplasma.

**homoplast** (hóm'ópíás) *n*. [Gk. *homos* same *plastos* moulded.] An organ or organism formed of similar plastids coenobium catalact.

**homoplastic** (hóm'ópíás'tík) *n* [Gk. *homos* same *plastos* moulded.] *Part* homoplasty *appl* graft made into individual of same species *cf* autoplastic.

**homoplasty** (hóm'ópíás'ús) *n* [Gk. *homos* same *plastos* moulded] Convergence resemblance in form of structure between different organs or organisms due to evolution along similar lines also homoplasia *notely*

**homopterous** (hóm'óp'terús) *n*. [Gk. *homos* same *pteron* wing] Having the wings alike.

**homorhizal** (hóm'ór'ízál) *n*. [Gk. *homos* same *rhiza* root.] Not having an antitropical root, as Pteridophyta *Opp* allorhizal.



homosomal (hōm sōs māl) *n* [Gk. *homos* same *soma* body] Occurring in, or *part* the same body *appl* rearrangements restricted to a single chromosome.

homosporangic (hōm sōpōrānjik) *n*. [Gk. *homos* same *spora* seed *angrion* vessel] Bearing spores of one kind or of two kinds in one sporangium.

homosporous (hōm sōpō rūs) *n* [Gk. *homos* same *spora* seed] Producing only one kind of spore homosporic isosporous.

homostyled (hōm sōl'id) *n*. [Gk. *homos* same *stylos* pillar] With uniform styles homogonous.

homosynapsis (hōm sōnāp'sis) *n* [Gk. *homos* same *synapsis* union.] Pairing of two homologous chromosomes of heterosynapsis.

homotaxial (hōm sōtāk'siāl) *n* [Gk. *homos* same *taxis* arrangement.] Containing the same assemblage of species. *appl* fossiliferous deposits.

homotaxis (hōm sōtāk'sis) *n*. [Gk. *homos* same *taxis* arrangement.] Similar assemblage or succession of species or types in different regions or strata, not necessarily contemporaneous.

homothallic (hōm sōthāl'ik) *n* [Gk. *homos* same *thallos* young shoot.] Forming zygozoetes from two branches of the same mycelium *appl* moulds *Opp* heterothallic.

homothermous, — homothermal *q v*

homotropous (hōm sōtrōpūs) *n* [Gk. *homos* same *trope* turn.] Erect having micropyl and chalazal at opposite ends *appl* ovules

homotypic (hōm sōtīp'ik) *n*. [Gk. *homos* same *typos* pattern.] Homocotypic *q v* *part* or exhibiting homotypy

homotypy (hōm sōtīp'i) *n* [Gk. *homos* same *typos* pattern.] Equality of structures along main axis of body serial homology reversed symmetry enantiomorphic condition, *q v*

homoxylous (hōm sōxī'lūs) *n*. [Gk. *homos* same *xylous* wood.] *Appl*

wood without vessels and consisting of tracheids.

homoxygous (hōm sōxīgō ūs) *n* [Gk. *homos* same *xygos* yoke.] Condition of having a given genetical factor in the d plex condition and producing gametes of only one kind as regards that factor

homoxygote (hōm sōxīgōt) *n*. [Gk. *homos* same *xygos* yoke] An organism in which characters are stable resulting from union of gametes bearing similar genes.

homoxygous (hōm sōxīgō ūs) *n*. [Gk. *homos* same *xygos* yoke.] Having identical genes for a given character exhibiting or *part* homoxygote.

homunculus (hōm ūn'kulūs) *n* [L. *homunculus* little man.] The small miniature of human foetus supposed to be in spermatozoon, according to Animalculists homonculus.

honey-dew — a sugary exudation found on leaves of many plants a viscous fluid secreted by mycelium of ergot a sweet secretion produced by certain insects, *q v* by aphids

hooded (hood'ēd) *n*. [A.S. *hōd*.] Bearing a hood-like petal cucullate rolled up like cone of paper as certain leaves having head conspicuously and differently coloured from rest of body having crown on head; having wing shaped expansions on neck, as in cobra

hook-glands, — paired longitudinal glands uniting anteriorly to form head gland in Pentastomida.

hordeaceous (bō dēā shēā) *n* [L. *hordeum*, barley] *Part* or resembling barley

horiodimorphism (bō rīōdīmōr'fizm) *n* [Gk. *horos* in season *dit*, twice *morphe* shape] Seasonal dimorphism.

horizon (bōrī'zōn) *n*. [Gk. *horion* bounding] Soil layer of more or less well-defined character a layer of deposit characterised by definite fossil species and formed at a definite time.

- horizontal (hōr'izōn'tāl) *n.* [Gk. *horizon* bounding.] Growing in plane at right angles to primary axis.
- horm (hōr'mō) *n.* [Gk. *hormē* impetus.] Purposeful behaviour consisting of urge or drive in living cells or organisms of an vital.
- hormocyst (hōr'mōsīt) *n.* [Gk. *hormos* chain *kystis* bladder.] A modified thick walled homogonium, in some blue green algae.
- homogonium (hōr'mōgō'nīum) *n.* [Gk. *hormos* chain *gonē* generation.] That portion of an algal filament between two heterocysts, which, breaking way acts as a reproductive body *homogone*.
- hormones (hōr'mōnz) *n. pl.* [Gk. *hormainō* to excite.] Substances normally produced in cells and necessary for the proper functioning of other distant cells to which they are conveyed and of the body as whole internal secretions of ductless glands which pass into blood vessels by osmosis exerting agents, *opp.* *chalcones* internal secretions in plants, as *saxatol*, *q.v.*
- hormonal (hōr'mōn'ik) *n.* [Gk. *hormainō*, to excite.] Pertaining to hormones *appl.* excitatory internal secretions, *opp.* *chalconic*.
- hormoproteins (hōr'mōp'ō'tēins) *n. pl.* [Gk. *hormainō* to excite *protos* first.] Proteins or protein derivatives secreted by endocrines.
- horn (hōrn) [A.S. *horn*.] The process on head of many animals any projection resembling horn anterior part of each viscus when posterior parts are united to form median corpus *uteri* tuft of feathers as in owl *spine* in fishes *tentacle* in snails *an* *wn* any pointed projection or process in plants *cornu*.
- horn core,—the os cornu fusing with frontal bone over which fits hollow horn of ruminants.
- horodimorphism, — horiodimorphism, *q.v.*
- horotell (hōr'ōtēl'ik) *n.* [Gk. *horos*, right time *telos* fulfilment.] Evolving at the standard rate of bradytelic, tachytelic.
- host (hōst) *n.* [L. *hostis* stranger.] Any organism in which another organism spends part or the whole of its existence, and from which it derives nourishment or gets protection an organism which receives grafted or transplanted tissue.
- house (hows) *n.* [A.S. *hūs*.] The external gelatinous like covering secreted by certain tunicates.
- Huston val as [J. Huston Irish surgeon]. Semilunar transverse folds of mucous membrane in the rectum *plicae transversales recti*.
- humeral (hū'mērāl) *n.* [L. *humerus* shoulder.] Pertaining to shoulder region *pert.* the anterior basal angle of insect wing *appl.* a cross vein one of horny plates on plastron of chelonians.
- humerus (hū'mērūs) *n.* [L. *humerus* shoulder.] The bone of the upper arm.
- humistratus (hū'mistrāt'ūs) *n.* [L. *humerus* soil *sternere* to spread.] Spreading over surface of ground.
- humoral (hū'mōrāl) *n.* [L. *humor* moisture.] *Appl.* theory of immunity ascribing to body fluids the power to resist infection.
- humour (hū'mōr) *n.* [L. *humor* moisture.] Any fluid or juice the fluid of the eye.
- humus (hū'mūs) *n.* [L. *humus* earth.] A dark material formed by decomposition of vegetable or animal matter and constituting organic part of soils.
- husk (hūsk) *n.* [M.E. *huske*.] The outer coating of various seeds.
- Huxley's layer [T. H. Huxley Eng. fish zoologist]. The middle layer of polyhedral cells in inner root sheath of hair.
- hyalin (hī'ālīn) *n.* [Gk. *hyalos* glass.] Clear transparent free from inclusions.
- hyalodermis (hī'ālōdēr'mis) *n.* [Gk. *hyalos* glass *derma*, skin.] Tissue of large, empty and absorptive cells in Sphagnum.

- hyalogen** (hí'álôjén) *n* [Gk. *hyalos* glass *genes* producing] Any of substances found in animal tissues which are insoluble and related to mucoids.
- hyaloid** (hí'áloid) *a* [Gk. *hyalos* glass *eidos* form.] Glassy transparent.
- hyaloid artery**—from central artery of retina through hyaloid canal to back of lens in foetal eye
- hyaloid canal**,—through vitreous body of eye from optic nerve to back of lens.
- hyaloid fossa**,—anterior concave of vitreous body receptacle of crystal line lens.
- hyaloid membrane**,—delicate membrane enveloping vitreous body of eye.
- hyalomere** (hí'álmér) *n* [Gk. *hyalos* glass *meros* part.] The clear homogeneous part of a blood platelet, *egg* chromomere.
- hyalomucoid** (hí'álmú'koid) *a*. [Gk. *hyalos* glass *L. mucus* mucus Gk. *eidos* like.] One of the non-phosphorised glyco proteins in vitreous humour.
- hyaloplasm** (hí'áloplásm) *n* [Gk. *hyalos* glass *plasma* mould.] Ground substance of cell as distinguished from microsomes or from reticulum or spongioplasm ectoplasm or peripheral zone in plant cells also hyaloplasma.
- hyalopterous** (hí'álop'térús) *a*. [Gk. *hyalos* glass *pteron*, wing] Having transparent wings.
- hyalosome** (hí'álosóm) *n*. [Gk. *hyalos* glass *soma*, body] A nucleolar like body in a cell-nucleus only slightly stainable by nuclear or plasma stains.
- hyalosporous** (hí'álospó'rús hí'álospórus) *a* [Gk. *hyalos* glass *spheros* seed.] Having colourless spores or conidia.
- hybrid** (hí'bíd) *n* [L. *hibrida* cross.] Any cross-bred animal or plant heterozygote. *a*. Cross-bred heterozygous.
- hybrid incapacitation**,—hybrid sterility and inviability inclusively
- hybridisation** (hí'brídiz'ashún) *n* [L. *hibrida* cross.] Act or process of hybridising state of being hybridised cross-fertilisation.
- hybridine** (hí'brídín) *n* [L. *hibrida*, cross.] To interbreed to cross, to produce hybrids.
- hybridism** (hí'brídizm) *n*. [L. *hibrida* cross.] The state or quality of being a hybrid.
- hydathode** (hí'dáthód) *n* [Gk. *hydatos* of water *hodos* way] An epidermal structure specialised for secretion, or for exudation of water water stomata.
- hydatid** (hí'dátid) *n*. [Gk. *hydatís* watery vesicle] Any vesicle or sac filled with clear watery fluid; sac containing encysted stages of larval tapeworm vestige of Müllerian duct constituting appendix of testis, hydatid of Morgagni stalked appendix of epididymis.
- hydatiform** (hí'dátifórm) *a*. [Gk. *hydatís* watery vesicle *L. forma* shape.] Resembling a hydatid.
- hydatigenous** (hí'dátí'énús) *a*. [Gk. *hydatís* watery vesicle *genes* producing] Producing or forming hydatids.
- hydranth** (hí'dránth) *n* [Gk. *hydra* water *anthos* flower] A nutritive zooid hydroid colony.
- hydrarch** (hí'drárk) *n* [Gk. *hydra* water *arche* beginning] *appl.* seres progressing from hydric towards mesic conditions.
- hydric** (hí'drík) *a*. [Gk. *hydra* water] Characterised by an abundant supply of moisture *appl.* plants, environment.
- hydrocaulis** (hí'drókálús) *n* [Gk. *hydra* water *L. caulis* stalk.] The branching vertical portion of coenosarc in hydroid colony.
- hydrocircus** (hí'dróser'kús) *n* [Gk. *hydra* water *kyrkos* circle] The hydrocoelic ring surrounding mouth in echinoderms.
- hydrocladia** (hí'dró'kládía) *n* *plu.* [Gk. *hydra* water *klados* shoot.] The secondary branches of a hydrocaulis.

hyd ocoel (hí'dróesl) *n*. [Gk. *hydor* water *koilos* hollow] The water vacuola system in echinodermata.

hydrocrypt phyte, — hydrophyt *f*.

hydrocyat (hí'dróesat) *n*. [Gk. *hydor* water *kystis* bladder] A dactylozooid.

hydroecium (hídré'stüm) *n*. [Gk. *hydor* water *oikos* house.] A closed tube at pper end of siphonophore an infundibulum.

hydroid (hí'droid) *n. s.* [Gk. *hydor* water *eidos* form.] Elongated empty cell in central cylinder of mosses tracheid the polyp of Hydrosoma.

hydrolysis (hídról'hsis) *n*. [Gk. *hydor* water *lysis* to dissolve.] The reaction between chemical compound and the hydrogen and hydroxyl ions of water.

hydrom (hí'dröm) [Gk. *hydor* water *metros* full] Any tissue that conducts water also hydrom.

hydromegathism (hí'drümäg'äthärm) *n*. [Gk. *hydor* water *megas* great *thormos* heat.] A plant which must have much moisture and heat to develop fully.

hydromorphi (hídrömórfik) *s*. [Gk. *hydor* water *morphe* form.] Structurally adapted to an aquatic environment, as organs of water plants.

hydronasty (hí'drónäs'tis) [Gk. *hydor* water *nastis* close-pressed.] Plant movement induced by changes in atmospheric humidity.

hydrophilous (hí'dróf'ilüs) *s*. [Gk. *hydor* water *philos* to love.] Pollinated through agency of water.

hydrophoric (hí'dróf'ör'ik) *s*. [Gk. *hydrophoros* carrying water] Appl. canal, the madreporic or stone canal *q. s.*

hydrophyll *m* (hí'dróf'il'üm) *n*. [Gk. *hydor* water *phylon* leaf.] One of leaf-like transparent bodies arising above and partly covering the sporangia in siphonophore.

hydrophyte (hí'dróf'it) *n*. [Gk. *hydor* water *phyton* plant.] An aquatic plant, cf. hygrophyte.

hydrophyton (hídróf'itön) *n*. [Gk. *hydor* water *phyton* plant.] A complete hydroid colony root-like organ, stem and branches.

hydroplanula (hí'dróplän'ülä) *n*. [Gk. *hydor* water *L. planus* flat.] Stages between planula and actinula in larval history of coelenterates.

hydropolyp (hí'drópöl'ip) *n*. [Gk. *hydor* water; *F. polypus* polyp] A polyp of hydroid colony a hydula.

hydropenics (hí'drópén'itis) *n*. [Gk. *hydor* water *penos* exertion.] The science and art of crop production in liquid culture media of water culture.

hydropore (hí'drópör) *n*. [Gk. *hydor* water *poros* opening] The opening into right hydrocoel in echinoderm larvae.

hydropots (hí'drópöt) *s*. [Gk. *hydor* water *potos* drinker] A cell or cell group in some submerged leaves, easily permeable by water and salts.

hydropyl (hí'dróp'il) *s*. [Gk. *hydor* water *pyls* gate.] Specialised area in cuticular membrane of embryo, for passage of water as in grasshoppers.

hydrorhabd (hí'droräbd) *n*. [Gk. *hydor* water *rhabdos* rod.] A rhizosome, in graptolites.

hydrorhiza (hí'dróf'ä) *n*. [Gk. *hydor* water; *rhiza*, root.] The creeping root-like portion of coenosarc of hydroid colony.

hydrosere (hí'dróes'r) *n*. [Gk. *hydor* water; *L. sero* to put in row] A plant succession originating in wet environment.

hydrosome (hí'dróesüm) *n*. [Gk. *hydor* water *soma*, body] The conspicuously hydra-like stage in coelenterate life-history hydrosoma.

hydrospire (hí'dróespr) *n*. [Gk. *hydor* water *L. spiro* coil.] The folds on the steroom of blastoids, being respiratory structures.

- hydrostatic (hí'drōstát'ík) *n.* [Gk. *hydor* water *statikos* causing to stand.] *Appl.* organs of flotation as air sacs in aquatic larvae of insects.
- hydrostome (hí'drōstōm) *n.* [Gk. *hydor* water *stoma* mouth.] The mouth of a hydroid polyp.
- hydrotaxis (hí'drōtáks'is) *n.* [Gk. *hydor* water *taxis* arrangement.] Response of organisms to stimulus of moisture.
- hydrotheca (hí'drōthēk'ā) *n.* [Gk. *hydor* water *thēke* cup.] Cup-like structure into which the polyp may withdraw in many coelenterates.
- hydrotropic (hí'drōtrōp'ík) *n.* [Gk. *hydor* water *trope* turn.] *Appl.* curvature of a plant organ towards a greater degree of moisture.
- hydrotropism (hí'drōtrōpizm) *n.* [Gk. *hydor* water *tropein* to turn.] Response to stimulus of water.
- hydrula (hí'droolā) *n.* [Gk. *hydor* water.] Hypothetical simple polyp.
- hytal (hí'tāl) *n.* [Gk. *hyetos* rain.] *Part* rain *part* precipitation.
- hygiene (hí'jēn) *n.* [Gk. *hygieinai* healthful.] That part of biology dealing with health preservation.
- hygrie (hí'grík) *n.* [Gk. *hygras* wet.] Humid tolerating or adapted to humid conditions *Opp* x *nc.*
- hygrochasy (hí'grōkās'is) *n.* [Gk. *hygras* wet *chasis* separation.] Dehiscence of seed vessels when induced by moisture of xerochasy.
- hygrokinesis (hí'grōkīnē'sis) *n.* [Gk. *hygras* wet *kinesis* movement.] Movement in response to change in humidity.
- hygrophilous (hí'grōfīlōs) *n.* [Gk. *hygras* wet *philein* to love.] Inhabiting moist or marshy places.
- hygrophyte (hí'grōfīt) *n.* [Gk. *hygras* wet *phyton* plant.] A plant which thrives in plentiful moisture of hydrophyte.
- hygroplasm (hí'grōplāzm) *n.* [Gk. *hygras* wet *plasma*, mould.] The more liquid part of protoplasm *opp* stereoplasm.
- hygroscopic (hí'grōskōp'ík) *n.* [Gk. *hygras* wet *skopein* to regard.] Sensitive to or retaining moisture.
- hyllon (hí'llōn) *n.* [Gk. *hyle* wood *on* being.] Forest climax bylum.
- hylophagous (hí'lōf'agōs) *n.* [Gk. *hyle* wood *phagōin* to eat.] Eating wood *appl.* certain insects.
- hylophyte (hí'lōfīt) *n.* [Gk. *hyle* wood *phyton* plant.] A plant growing in woods.
- hylotomous (hí'lōtōmōs) *n.* [Gk. *hyle* wood *tomai* to cut.] Wood-cutting *appl.* certain insects.
- hymen (hí'mēn) *n.* [Gk. *hymen* membrane.] Thin fold of mucous membrane at orifice of vagina.
- hymenial (hímē'nīāl) *n.* [Gk. *hymen* skin.] *Part.* hymenium.
- hymeniferous (hí'mēnīfērōs) *n.* [Gk. *hymen* skin *L. ferre* to carry.] Having a hymenium.
- hymenium (hímē'nīūm) *n.* [Gk. *hymen* skin.] The outermost layer of mushroom lamellae, or of other fungi consisting of spore producing cells interspersed with barren cells or paraphyses.
- hymenophore (hí'mēnōfōr) *n.* [Gk. *hymen* ski *phorōin* to carry.] The hymenial portion of sporophore of a fungus.
- hymenopterous (hí'mēnōp'tērōs) *n.* [Gk. *hymen* skin *pteron* wing.] Having membranous wings *appl.* certain insects.
- hyobranchial (hí'ōbrāng'kiāl) *n.* [Gk. *Y* *brachia*, gills.] *Part* hyoid and branchial arches.
- hyoepiglottic (hí'ōepīg'lōt'ík) *n.* [Gk. *Y* *epi* *pon* *glottis*, tongue.] Connecting hyoid and epiglottis.
- hyoglossal (hí'ōglōs'al) *n.* [Gk. *Y* *glossa* tongue.] *Part* tongue and hyoid *appl.* membrane and muscle.
- hyoid (hí'oid) *n.* [Gk. *hyoides* Y shaped.] *Part* or designating bone or series of bones lying at base of tongue and developed from hyoid arch of embryo *appl.* a sac enclosing pharynx in some insects hyocean. *n.* The hyoid bone.

hyoidæan (hîoid éân) *n.* [Gk. *hyoides* Y-shaped.] *Part.* associated with the hyoid arch or bone *appl.* branch of first efferent branchial vessel or of lingual artery *appl.* crura, the posterior post-tracheal nerve.

hyoidæus (hîoid éôs) *n.* [Gk. *hyoides* Y-shaped.] A nerve which supplies mucosa of mouth and muscles of hyoid region.

hyomandibular (hî'ômândib'ulâr) *n.* [Gk. *Y*; L. *mandibularis*, jaw.] *Part.* hyoid and mandible *part.* dorsal segment of hyoid arch in fishes.

hyomental (hî'ômên'tâl) *n.* [Gk. *Y* L. *mentum* chin.] *Part.* hyoid and chin.

hyoplastron (hî'ôplâs'trôn) *n.* [Gk. *Y*; F. *plastron*, breast plate.] The second lateral plate in plastron of Chelonida.

hyostapes (hî'ôstâ'pês) *n.* [Gk. *Y* L. L. *stapes* stirrup.] Lower portion of columellar primordium which gives rise to part of columella in some reptiles.

hyostern *m.* (hî'ôstêr'nîsm) *n.* [Gk. *Y*; *sternum* breast.] Hyoplastron.

hyostylic (hî'ôstîl'ik) *n.* [Gk. *Y* *stiles* pillar.] Having jaw articulated to skull by hyomandibular or corresponding part; exhibiting hyostyly of osteolytic.

hyosymplecticum (hî'ôsimplêk'tî-kûm) *n.* [Gk. *Y* *symplektos* plaited together.] The cartilaginous primordium from which hyomandibular and symplecticum are derived.

hyothyroid (hî'ôthî'rôid) *n.* [Gk. *Y* *thyra* shield *eidos* like.] *Part.* hyoid bone and thyroid cartilage of larynx *appl.* ligaments, membrane.

hyallelomorph (hîp'âlêl'ômôrf) *n.* [Gk. *hypo* under *allelon* from one another *morpho* form.] Allomorphs which under certain conditions are themselves compound

hypandrium (hîpân'drîsm) *n.* [Gk. *hypo* under *anter* male.] Subgenital plate or ninth abdominal sternite of certain insects

hypanthium (hîpân'thîsm) *n.* [Gk. *hypo* under *anthos* flower.] Any enlargement of the torus.

hypanthodii *m.* (hîp'ânthô'dîsm) *n.* [Gk. *hypo* under *anthodes* like flowers.] An inflorescence with concave capitulum on whose walls the flowers are arranged.

hypantrum (hîpân'trûm) *n.* [Gk. *hypo* under *antrem* cave.] Notch on vertebrae of certain reptiles for articulation with hyosphene.

hypapophysis (hîp'âpôf'îs) *n.* [Gk. *hypo* under *apo* upon *physis* to grow.] A ventral process on vertebral centrum.

hyparterial (hîp'ârî'rîâl) *n.* [Gk. *hypo* under L. *arteria*, artery.] Situated below an artery *appl.* branches of bronchi below pulmonary artery

hypaxial (hîpâk'sîl) *n.* [Gk. *hypo* under L. *axis* axis.] Ventral; below vertebral column *appl.* muscles.

hyperapophysis (hî'pêrâpôf'îs) *n.* [Gk. *hyper* above *apo* from *physis*, to grow.] A postero-lateral process of dorsal side of vertebra.

hyperchromasy (hî'pêkrô'mâsî) *n.* [Gk. *hyper* above *chroma* colour.] A relatively superabundant supply of chromatin to cytoplasm in cell.

hyperchromatosis (hî'pêkrô'mâtô'sîs) *n.* [Gk. *hyper* above *chroma* colour.] Excess of nuclear substance in cell previous to division.

hyp coracoid (hî'pêrkô'râkôid) [Gk. *hypo* above *korax* crow *eidos* form.] *Part.* or designating upper bone at base of pectoral fin in fishes.

hypercyosis (hî'pêrîs'sîs) *n.* [Gk. *hyper* above *kyosis* conception.] Superfoetation additional fertilization in a mammal already pregnant.

hyperfeminization, —condition of a feminized male with female characteristics exaggerated, as in small size and weight.

hypergameteals (hî'pêrgâmê'ts) *n.* [Gk. *hyper* above *gamos* marriage.] Process of absorption by female of excess spermatozoa.

- hypermasculinisation, — condition of a masculinized female with mal characteristics exaggerated, as in large proportions, appearance of male secondary sexual characters.
- hypermetamorphosis (hī'pēr'mēt'ā mōr'fōsis) *n.* [Gk. *hyper* above *metamorphosis* shaping] A protracted and thoroughgoing metamorphosis metamorphosis involving two or more distinct types of larval instar in certain insects.
- hypermorphosis (hī'pēr'mōr'fōsis) *n.* [Gk. *hyper* above *morphosis* shaping] The development of additional characters in comparison with the adult ancestral stage.
- hyperparasite (hī'pēr'pā'sait) *n.* [Gk. *hyper* above *para* beside *sis* food.] A parasite which is parasitic on or in another parasite.
- hyperphalangy (hī'pēr'fāl'anj) *n.* [Gk. *hyper* above *phalangeis* line of battle.] Condition of having digits with more than normal number of phalanges.
- hyperpituitary m(hī'pēr'pīt'itāriūm) *n.* [Gk. *hyper* above *L. pituita* phlegm.] Overaction of pituitary gland, resulting in gigantism or giantism hyperhypophyisism.
- hyperplasia (hī'pēr'plā'siā) *n.* [Gk. *hyper* above *plassein* to mould.] Overgrowth excessive or hyperplastic development due to increase in number of cells / hypertrophy
- hyperplaid (hī'pēr'plaid) *n.* [Gk. *hyper* above *haplaos* onefold *eidos* form] Aneuploid with extra chromosomes, *also* hyperploid.
- hyperpnea (hī'pēr'pnā) *n.* [Gk. *hyper* above *pnai* breath.] Rapid breathing due to insufficient supply of oxygen.
- hypersensitivity (hī'pēr'sēn'sitv'itv) *n.* [Gk. *hyper* above *L. sentis* to feel.] A condition of being unduly sensitive to stimulus.
- hypertely (hī'pēr'tēl) *n.* [Gk. *hyper* above *telos* end.] Excessive imitation in colour or pattern being of problematical utility over development, as canines of Baberum; hypertelia.
- hypertensin, — angiotensin, *q.v.*
- hypertonia (hī'pēr'tōnīā) *n.* [Gk. *hyper* above *tonos* tone] Excessive tonicity
- hypertrophy (hī'pēr'trōf) *n.* [Gk. *hyper* above *trophi* nourishment.] Excessive growth due to increase in size of cells of hyperplasia.
- hypha (hī'fā) *n.* [Gk. *hyphē* web] The thread-like element or filament of vegetative mycelium of fungus filamentous cell in medulla of an lgal thallus.
- hyphasma (hī'fāsmā) *n.* [Gk. *hyphasma* thing woven.] A barren mycelium as *Agaricus* thallus.
- hyphodrome (hī'fōdrōm) *n.* [Gk. *hyphē* web *dromos* course] Running throughout the tissues *also* thick leaves where veins are not visible from surface.
- hyphopodium (hī'fōpō'diūm) *n.* [Gk. *hyphē* web *pous* foot.] A hyphal branch with enlarged terminal cell or haustorium for attaching the hypha as in some Ascomycetes.
- hypocyst (hī'pō'sist) *n.* [Gk. *hypnos* sleep *cystis* bladder] Cyst in which contained organism simply rests dormant cyst.
- hypnody (hī'pōdī) *n.* [Gk. *hypnos* sleepiness.] The long resting period of certain larval forms.
- hypnogenic (hī'pōjēn'ik) *n.* [Gk. *hypnos* sleep *genesis* producing] Sleep-inducing *also* influences which tend to produce hypnosis.
- hypnosperm (hī'pō'spērm) *n.* [Gk. *hypnos* sleep *sperma*, seed.] A hypnosporic
- hyp osporangium (hī'pō'spōrān'siūm) *n.* [Gk. *hypnos* sleep *spora* seed *angosium* vessel.] A sporangium containing resting spores.
- hypnosporic (hī'pō'spōr'ic) *n.* [Gk. *hypnos* sleep *spora* seed.] A resting spore a syzygy that remains in quiescent condition during winter
- hypnote (hī'pōtē) *n.* [Gk. *hypnos* sleep.] An organism in a dormant condition.
- hypochoen (hī'pō'chōēn) *n.* [Gk. *hypo* under *choen* chain to

- gape] Achenes developed from an inferior ovary.
- hypocarpium (h'pōk'ar'ion) *n.* [Gk. *hypo* under; *carion* little egg.] A small lobe below the optic lobes of most teleosts.
- hypobasal (h'pōb'as'al) *n.* [Gk. *hypo* under; *basis* base.] The lower segment of developing ovule, which ultimately gives rise to the root. *Opp.* epibasal.
- hypoblast (h'pōb'last) *n.* [Gk. *hypo* under *blastos* bud.] The inner germ layer in a gastrula.
- hypoblastic (h'pōb'last'ik) *a.* [Gk. *hypo* under, *blastos* bud.] *Peri.* or derived from, the inner layer endodermal.
- hypobranchial (h'pōbr'ank'i'al) *a.* [Gk. *hypo* under *branchia* gills.] *Peri.* lower or fourth segment of branchial arch.
- hypocentrum (h'pōs'ent'rūm) *n.* [Gk. *hypo* under *centros* centre.] A transverse cartilage that arches below nerve cord and forms part of vertebral centrum.
- hypocercal (h'pōs'erk'al) *a.* [Gk. *hypo* under *keras* tail.] Having notochord terminating in lower lobe of caudal fin.
- hypochilium (h'pōk'i'l'ium) *n.* [Gk. *hypo* under *chilos* lip.] The lower portion of lip of an echid.
- hypochondri *m.* (h'pōk'ōs dr'itūm) [Gk. *hypo* under *chondros* cartilage.] A region lateral to epigastric and above lumbar.
- hypochord (h'pōk'ōrd) *n.* [Gk. *hypo* under *chord* cord.] A transitory subnotochordal rod in annelimos.
- hypochordal (h'pōk'ōrd'al) *a.* [Gk. *hypo* under *chord* cord.] Below the notochord *appl.* lower lobe of caudal fin *appl.* bar of mesodermal tissue developing into ventral arch of atlas and amalgamating with fibrocartilages in other cervical vertebrae.
- hypocleid *m.* (h'pōk'li'd'itūm) *n.* [Gk. *hypo* under *kleis* key *laten, skin.*] The interclavicle.
- hypocone (h'pōk'ōn) *n.* [Gk. *hypo* under; *konos* cone.] Postero-
- lateral cusp of upper molar the part posterior to girdle in Dinoflagellata, *app.* epicone.
- hypocoelid (h'pōk'ōn'id) *n.* [Gk. *hypo* under *konos* cone.] Postero-buccal cusp of lower molar.
- hypocoenul (h'pōk'ōn'ul) *n.* [Gk. *hypo* under *konos* cone.] Fifth or distal cusp of upper molar.
- hypocoelid (h'pōk'ōn'ul'id) *n.* [Gk. *hypo* under *konos* cone.] Postero-medial cusp of lower molar.
- hypocoracoid (h'pōk'ōr'ak'oid) *a.* [Gk. *hypo* under *koros* crow; *oides* like.] *Peri.* lower bone at base of pectoral fin in fishes.
- hypocotyl (h'pōk'ōt'il) *n.* [Gk. *hypo* under *kotyle* cup.] That portion of stem below cotyledons in an embryo.
- hypocotyledonary (h'pōk'ōt'il's'dōn-ār'i) *a.* [Gk. *hypo* under *kotyle* hollow.] Below the cotyledons.
- hypocrateriform (h'pōk'r'at'ēr'fōrm) *a.* [Gk. *hypo* under *krater*, bowl *L. formae, shape.*] Saucer-shaped having a gamopetalous corolla with long narrow tube, and limbs at right angles to tube hypocraterimorphous.
- hypod ctyl *m.* (h'pōd'ak't'itūm) *n.* [Gk. *hypo* under *aktylos* digit.] The under surface of bird toes.
- hypod *ma* (h'pōd'ēr'mā) *n.* [Gk. *hypo* under *derma, skin.*] Hypodermis or tunic just under epidermis in plants.
- hypodermal (h'pōd'ēr'māl) *a.* [Gk. *hypo* under *derma* skin.] *Peri.* hypodermis; *part* hypodermis.
- hypodermella (h'pōd'ēr'm'ell) *n.* *plu.* [Gk. *hypo* under *derma, skin.*] Sponge spicules situated just below the dermis or skin.
- hypodermi (h'pōd'ēr'm'ik) *a.* [Gk. *hypo* under; *L. dermis* skin.] *Peri.* parts just under the skin.
- hypodermis (h'pōd'ēr'm'is) *n.* [Gk. *hypo* under *L. dermis* skin.] The cellular layer lying beneath and secreting the cuticle of Annelata, Arthropoda, etc.; hypoblast, *g.s.* hypodermis, *g.s.*



**hypodierotic** (hí'pódikrót'ík) *n.* [Gk. *hypo* under; *di* two *krotin* to beat.] Having two arterial beats for the one cardiac.

**hypogastric** (hí'p'ógás'trík) *n.* [Gk. *hypo* under *gaster* stomach.] Pert. lower median region of abdomen *appl.* nery vel plexus etc.

**hypogastrium** (hí'p'ógás'tríúm) *n.* [Gk. *hypo* under *gaster* stomach.] Lower median region of abdomen.

**hypogastroid**,—*hypobachium*, *p.p.*

**hypogeal** (hí'p'ójé'ál) *n.* [Gk. *hypo* under *ge* earth.] Undergoand *appl.* stems, etc. also hypogean.

**hypogenesis** (hí'p'ójén'ésla) *n.* [Gk. *hypo* under *genesis* origin.] Development without occurrence of alternation of generations.

**hypogenesis** (hí'p'ójén'tú) *n.* [Gk. *hypo* under *genesis* produced.] Growing on lower surface of anything.

**hypog. oca** (hí'p'ój'ís) *n.* [Gk. *hypo* under *ge* earth.] Grown g or maturing under earth surface.

**hypoglossal** (hí'p'ógíós'ál) *n.* [Gk. *hypo* under *glossa* tongue.] The twelfth paired cranial nerve distributed to base of tongue.

**hypoglossitis** (hí'p'ógíót'ís) *n.* [Gk. *hypo* under *glossa*, tongue.] The under part of tongue a division of labium of beetles.

**hypognathous** (hí'p'óg'náthós) *n.* [Gk. *hypo* under *gnathos* jaw.] Having the lower jaw slightly longer than the upper.

**hypogynium** (hí'p'ójín'túm) *n.* [Gk. *hypo* under *gyn* female.] Structure supporting ovary in such plants as sedges.

**hypogynous** (hí'p'ójín'tús) *n.* [Gk. *hypo* under *gyn* female.] Inserted below the gynoecium, and not adherent immediately below oogonium *appl.* antheridium as in some Peronosporales.

**Hypohyal** (hí'p'óhí'ál) *n.* [Gk. *hypo* under *hyaloides* Y-shaped.] The hyoid element lying between ceratohyal and basihyal.

**hypodischium** (hí'p'ódís'híúm) *n.* [Gk. *hypo* under *eschion* hip.] A

small bony rod passing backwards from ischiadic symphysis and supporting ventral cloacal wall hypogastroid; or cloacae.

**hypolemmal** (hí'p'ólém'ál) *n.* [Gk. *hypo* under *lemma*, peel.] Beneath the sarcolemma *appl.* arborescence of an axis cylinder in motor plate.

**hypolimnion** (hí'p'ólím'ní'ón, -lím'ní'ón) *n.* [Gk. *hypo* under *limnē* stagnant *limnē* marshy lake.] The water between the thermocline and bottom of lakes. *Opp.* epilimnion.

**hypomerai** (hí'p'óm'érá) *n.* [Gk. *hypo* under *meros* part.] Hypomeric *appl.* slender bones among lower trunk muscles in some fishes.

**hypomere** (hí'p'óm'ér) *n.* [Gk. *hypo* under *meros* part.] Lower or lateral plate zones of coelomic pouches.

**hypomeron** (hí'p'óm'értón) *n.* [Gk. *hypo* under *meros* part.] The lateral inflexed side of coleopterous prothorax.

**hypomorph** (hí'p'óm'órf) *n.* [Gk. *hypo* under *morphe* form.] A gene having smaller effect than its wild-type allelomorph.

**hyponasty** (hí'p'ónástí) *n.* [Gk. *hypo* under *nastos* close pressed.] The state of growth in a flattened structure in which the under surface grows more vigorously than the upper.

**hyponeural** (hí'p'ónú'rá) *n.* [Gk. *hypo* under *neurōn* nerve.] *Appl.* system of radial and transverse motor nerves in echinoderma.

**hypopneume** (hí'p'óp'neúm) *n.* [Gk. *hypo* under *pneuma* underground passage.] The funnel of Cephalopoda.

**hyp. nychium** (hí'p'óní'kíúm) *n.* [Gk. *hypo* under *nyx* nail.] Layer of epidermis on which nail rests.

**hypog. talva** (hí'p'óp'et'álts) *n.* [Gk. *hypo* under *petalon* petal.] Having corolla inserted below and not adherent to, gynoecium.

**hypophamine** —see pitocin, pitresin.

**hypophare** (hí'p'ófár) *n.* [Gk. *hypo* under *pherein* to bear.] Lower part of sponge in which there are no chambers of spongophare.

- hypopharyngeal** (hī'pōfārin'jāl) *n.* [Gk. *hypo* under *pharynx* pharynx.] *Part.* or situated below or on lower surface of pharynx.
- hypopharynx** (hī'pōfāringks) *n.* [Gk. *hypo* under *pharynx* pharynx.] The lingua of many insects in mosquitoes, an outgrowth from base of labium which bears the salivary groove or duct.
- hypophloeodal** (hī'pōflō'dāl) *a.* [Gk. *hypo* under *phloëa* bark.] Living or growing under bark.
- hypophyllum** (hī'pōfīl'ūm) *n.* [Gk. *hypo* under *phyllon* leaf.] A scale-like leaf below a cladophyll base of stipulate leaf, forming abscission layer.
- hypophyllous** (hī'pōfīl'ūs) *a.* [Gk. *hypo* under *phyllon* leaf.] Located or growing under leaf.
- hypophyseal my** (hī'pōfīsē'kōmī) *n.* [Gk. *hypo* under; *physis* growth *at* out *excision*, cut.] Excision or removal of the pituitary gland.
- hypophyseal** (hī'pōfīsē'āl) *a.* [Gk. *hypo* under *physis* growth.] *Part.* the hypophysis.
- hypophysin** (hī'pōfī'sin) [Gk. *hypo*, under *physis* growth.] Pituitary extract.
- hypophysis** (hī'pōfī'sis) *n.* [Gk. *hypo* under *physis* growth.] The pituitary body also hypophyseus the olfactory pit in the lancelet the last cell of the scapular the cell from which root-tip arises in dicotyledons.
- hypopituitarism** (hī'pōpītī'kārīzīm) *n.* [Gk. *hypo* under L. *pituita* phlegm.] Deficiency of pituitary gland resulting in type of infantilism hypohypophysem.
- hypoplasia** (hī'pōplā'siā) *n.* [Gk. *hypo* under *plasis* formation.] Developmental deficiency hypoplastic development deficient growth.
- hypoplastron** (hī'pōplā'strōn) *n.* [Gk. *hypo* under F *plastron* shield.] The third lateral bony plate in plastron of Chelonia.
- hypopleuron** (hī'pōplōor'ōn) *n.* [Gk.

- hypo* under *pleura* side.] Region below metapleuron in insects.
- hypoploid** (hī'pōplōid) *a.* [Gk. *hypo* under; *haplois* onefold *side* form.] Aneuploid with fewer chromosomes lacking one chromosome of complement. *Opp.* hyperploid.
- hypopodium** (hī'pōpō'diūm) *n.* [Gk. *hypo* under; *podion*, little foot.] Basal portion of leaf including stalk style of carpel.
- hypoprect** (hī'pōprēkt) *n.* [Gk. *hypo* under *praktos* anus.] Medial prolongation of terminal abdominal segment beneath the anus, in Diplopoda and some insects.
- hypopteron** (hī'pōp'tērōn) *n.* [Gk. *hypo* under *pteron* feather.] Axillary feather in birds.
- hypoptilum** (hī'pōp'tīl'ūm) *n.* [Gk. *hypo* under *ptilon* down.] The aftershaft *q.v.*
- hypopus** (hī'pōpūs) *n.* [Gk. *hypo* under *pus* foot.] Cyst like stage of Tyroglyphidae.
- hyp pyge** (hī'pōp'jē) [Gk. *hypo* under *pyge* rump.] Clasp organ of male dipterous insect also hypopygium.
- hyporachis** (hī'pōrā'kīs) *n.* [Gk. *hypo* under *raχis* spine.] The stem of aftershaft of feather also hyporachis.
- hyposkeletal** (hī'pōskē'tāl) *a.* [Gk. *hypo* under *skēletos* hard.] Lying beneath or internally to endoskeleton.
- hyposphene** (hī'pōsfēn) *n.* [Gk. *hypo* under *spheos* wedge.] A wedge-shaped process on neural arch of vertebra of certain reptiles which fits into hypaxtrum.
- hypostasis** (hī'pōstā'sis) *n.* [Gk. *hypo* under *stasis* standing.] Sediment or deposit, as of blood; recessiveness of non-allelomorphic characters of epistasis.
- hypostati** (hī'pōstā'tik) *a.* [Gk. *hypo*, under *statis* standing.] *Appl.* the recessive of two characters whose genes are not at the same time allelomorphs exhibiting condition of hypostasis of epistatic *part* sediment.

- hypostereom** (hí'pöstér'tóm) *n* [Gk. *hypo* under *stereos* solid.] The third r inner layer of thecal plates, of *Cystidea* the inner layer of integument of *Crinoides*.
- hypostoma** (hí'pöstómā) *n* [Gk. *hypo* under *stoma*, mouth.] The fold bounding posterior margin of oral aperture in crustaceans labrum or median preoral plate in trilobites oral projection or manubrium of a hydrozoan anteroventral region of insect head ventral mouth part of ticks *hypostome*.
- hypostomatic** (hí'pöstómát'ík) *a*. [Gk. *hypo* under *stoma*, mouth.] Situated beneath stomata of plant epidermis *appt* chamber or cavity
- hypostomatous** (hí'pöstómát'is) *a*. [Gk. *hypo* under *stoma*, mouth.] Having stomata on under surface having mouth placed on lower or ventral side.
- hypotarsus** (hí'pôtár'sós) *n*. [Gk. *hypo* under *L. tarsus* ankle.] The calcaneum of a bird.
- hypothalamus** (hí'póthál'áms) *n* [Gk. *hypo* under *thalamos* chamber] Region below thalamus, and structures forming greater part of floor of third ventricle.
- hypothallus** (hí'póthál'ús) *n*. [Gk. *hypo* under *thallos* young shoot.] The marginal hyphal outgrowth membranous case bearing sporangia.
- hypotheca** (hí'póthē'ká) *n*. [Gk. *hypo* under *theka* cup.] Theca covering hypocone in Dinoflagellata younger half of frustule in diatoms.
- hypothecium** (hí'póthē'síúm -shíúm) *n* [Gk. *hypo* under *theka* cup.] The layer of dense hyphal threads below the thecium in lichens upper layer of ascoma.
- hypothar** (hí'póthē'r) *n*. [Gk. *hypo* under *thar* palm of hand.] Part the prominent part of palm of hand above base of little finger
- hypothetical units**, — the ultimate component parts of protoplasm
- ultracellular units ranking between the molecule and the cell also called variously physiological units, pangens, gemmules, biophores, bioblasts, somacules, idiosomes, plasomes micellae, plastidules, inotagmata, idiolabasts, biogens, gemmae, microsymbas, genes, gens, primordia.
- hypotonic** (hí'pótón'ík) *a*. [Gk. *hypo* under *tonos* tension.] Having a lower osmotic pressure than that of another fluid as of serum.
- hypotracheal** (hí'pótrē'chē'ík) *a*. [Gk. *hypo* under *trachea*, pore.] *Appt* the lower lateral bar of brachial basket of lamprey
- hypotrichous** (hí'pót rík'ús) *a*. [Gk. *hypo* under *trichis* hair] Having cilia mainly restricted to under surface with deficient hair
- hypotrochanteric** (hí'pótrók'ántēr'ík) *a*. [Gk. *hypo* under *trochanter* runner] Beneath the trochanter
- hypotympanic** (hí'pótimpán'ík) *a*. [Gk. *hypo* under *L. tympanon* drum.] Situated below the tympanum *appt* quadrate.
- hypotyp** (hí'pótp) *n*. [Gk. *hypo* under *typos* pattern.] Any specimen described or figured in order to amplify or correct the identification of *pedes* *plesiotypes* *g*.
- hypovalve** (hí'póválv) *n*. [Gk. *hypo* under *L. valva* fold.] The antapical part of envelope in certain Dinoflagellata *hypococone*.
- hypoxanthine** (hí'pózán'thín) *n* [Gk. *hypo* under *xanthos* yellow] A crystalline nitrogenous substance found in glandular and muscle tissue and in some seeds  $C_8H_8ON_4$ .
- hypoxygal** (hí'póst'gál) *n*. [Gk. *hypo* under *sygion* yoke.] Lower outside of syngial pair bearing no pinula.
- hypoodont** (hí'pé'ónt) *a*. [Gk. *hypo* under *odontos* tooth.] Part or designating teeth with high crowns and short roots; *hypoodont*.
- hypsophyll** (hí'pós'fíl) *n*. [Gk. *hypo* under *phyllon* leaf.] Any leaf beneath the sporophylls bract, bracteole.

**hypural** (hɪpʊ rəl) *n.* [Gk. *hypo* under *oura* tail.] *Part* bony structure, formed by fused haemal spines of last few vertebrae, which supports caudal fin in certain fishes.

**hysteranthous** (hɪstərɪn θəs) *n.* [Gk. *hysteros* coming after *anthes* flower] *Leading* after appearance of flowers.

**hysterectomy** (hɪstərɪkʊtəm) *n.* [Gk. *hystera*, womb *ektō* out *tomēn* cut.] *Excision* of the uterus.

**hysteria** (hɪstərɪə) *n.* [Gk. *hysteros* late arrival.] *Lag* in one of two associated processes or phenomena; lag in adjustment of external form to internal stresses, as in chromosome during spirallisation.

**hysterogenic** (hɪstərɪjənɪk) *n.* [Gk. *hysteros* later *genesis* birth] *Of* later development or growth.

**hysterosoma** (hɪstərɪsəmə) *n.* [Gk. *hysteros* after *soma*, body] *Part* of body posterior to proterosome and comprising metapodosome and opisthosoma in Acarina.

**hysterotely** (hɪstərɪtɪ) *n.* [Gk. *hysteros* after *telos* completion] *The* retention or manifestation of larval characters in pupa imago or of pupal characters in imago *metathetically* *epi* *prothetically*.

**hyther** (hɪθər) *n.* [Gk. *hys* (water) *ther* (heat)] *Combined* effect of moisture and temperature on an organism.

## I

**ichnite** (ɪkˈniːt) *n.* [Gk. *ichno* track.] *A* fossil footprint *ichno-* *lite*.

**ichthyic** (ɪkˈθɪk) *n.* [Gk. *ichthy* fish.] *Part* characteristic of fishes *ichthyoid*.

**ichthyodermite** (ɪkˈθɪdərɪt) *n.* [Gk. *ichthys* fish *derma* skin] *A* fossil dermal fin spine of fish.

**ichthyoid**,—**ichthyic**.

**ichthyolite** (ɪkˈθɪlɪt) *n.* [Gk. *ichthy* fish *lithos* stone.] *A* fossil fish or part of one.

**ichthyology** (ɪkˈθɪlɒdʒi) *n.* [Gk. *ichthy* fish *logos* discourse.] *The* study of fishes.

**ichthyopterygia** (ɪkˈθɪɒptərɪjə) *n.* *plu* [Gk. *ichthys* fish *pteryx* wing or fin.] *Paired* fish fins.

**icon type** (ɪkɒˈnɒtɪp) *n.* [Gk. *eikon* image *typos* pattern.] *Representation*, drawing or photograph, of type.

**icosandrous** (ɪkɒsən drəs) *n.* [Gk. *ikosa* twenty *andros* man.] *Having* twenty or more stamens.

**icotyp** (ɪkɒtɪp) *n.* [Gk. *eikon* image *typos* pattern] *A* representative specimen used for identification of a species.

**idi** (ɪd) *n.* [Gk. *idios* distinct.] *A* hypothetical structural unit the chromosome.

**ident** (ɪdɪnt) *n.* [Gk. *idos* distinct] *A* unit resulting from an aggregation of *ids* the chromosome.

**identical** (ɪdɪntɪkəl) *n.* [L. *idem*, the same.] *Appl* progeny having the same genes, as monozygotic twins.

**idoglandular** (ɪdɒglændjələr) *n.* [Gk. *idos*, to see L. *glandula*, small acorn.] *Part* glandular activity induced by mental image.

**idomotor** (ɪdɒmɒtər) *n.* [Gk. *idos* to see L. *movens* to move.] *Part*, unwill movement in response to mental image.

**idotype** (ɪdɒtɪp) *n.* [Gk. *idos*, to see *typos* pattern.] *Specimen* other than topotype named by the author who has described the species to which it belongs.

**ideovascular** (ɪdɒvəsˈkjələr) *n.* [Gk. *idos* to see L. *vasculum*, small vessel.] *Part* circulatory changes induced by a mental image.

**idioandrosporous** (ɪdɪˈændrɒspərəs) *n.* [Gk. *idios* distinct *andros* male *sporos* seed.] *With* androspores formed on filaments that do not bear oögonia.

**idiobiology** (id'ibiol'jɪ) *n* [Gk. *idios* personal *bios* life *logos* discourse.] Biology of an individual organism; autobiology.

**idioblast** (id'iblast) *n*. [Gk. *idios* distinct *blastos* bud.] A hypothetical unit *q.v.* plant cell containing oil gum, calcium carbonate or other product and which differs from the surrounding parenchyma.

**idlocalyptosome** (id'lokəlp'trōsōm) *n*. [Gk. *idios* distinct *elyptōs* covering *soma* body.] Outer zone derived from idiosphaerosome in sperm cells.

**idlochromatin** (id'lokrō'mātin) *n* [Gk. *idos* distinct *chroma* colour.] Temporarily dormant generative chromatin *f* trophochromatin.

**idlochromidia** (id'lokrōmid'ia) *n* *plu* [Gk. *idios* distinct *chroma*, colour.] Spores generative chromidia of trophochromidia.

**idlochromosome** (id'lokrō'sōmōsōm) *n* [Gk. *idos* distinct *chroma*, colour *soma* body.] A sex chromosome.

**idlocryptosome** (id'lokrīp'tōsōm) *n* [Gk. *idos* distinct *cryptos* hidden *soma*, body.] Inner zone derived from idiosphaerosome in sperm cells.

**idlo muscular** (id'lo mūs'kylār) *n*. [Gk. *idios* peculiar *L. musculus* muscle.] *Appl.* contraction of degenerated muscle artificially stimulated.

**idlophthartosome** (id'loft̥hārtōsōm) *n* [Gk. *idos* distinct *phthartos* transitory *soma*, body.] The idiosome retentive.

**idloplasm** (id'loplāzm) *n* [Gk. *idos* distinct *plasma*, mould.] Chromatin the generative or germinal part of a cell of trophoplasm.

**idiosoma** (id'lo'sōmā) *n* [Gk. *idos* distinct *soma* body.] The body prozona and opisthosoma of Acarina.

**idiosome** (id'lo'sōm) *n*. [Gk. *idos* distinct *soma*, body.] A hypothetical unit, *q* sphere or region

of cytoplasm differing in viscosity from remainder of cell and surrounding the centriole or centrosome *idiosome* *q.v.*

**idiosphaerosome** (id'lo'sfēr'sōsōm) *n*. [Gk. *idos* distinct; *sphaire* globe *soma*, body.] Acrosome central granule of idiosphaerotheca.

**idiosphaerotheca** (id'lo'sfēr'st̥hē'ka) *n* [Gk. *idos* distinct *sphaire*, globe; *thēkē* case.] Acroblast vesicle containing acrosome in sperm cells.

**idiotthalmous** (id'lo'thāl'mōs) *n* [Gk. *idios* distinct *thalmos* room.] *Appl.* lichens in which various parts are differently coloured from thallus.

**idiothermous** (id'lo'thēr'mōs) *n* [Gk. *idios* personal *thermos* hot.] Warm-blooded homeothermal.

**idiotype** (id'lo'tīp) *n* [Gk. *idios* personal *typos* pattern.] Individual genotype.

**idioviation**,—mutation *q.v.*

**idiosom** (id'lo'sōm) *n* [Gk. *idos* distinct *soma*, girdle.] In spermatogenesis a separated portion of archoplasm which ultimately becomes head-cap of spermatosoon; centrotheca cell-body of autocytes containing the centrioles.

**I-disc**,—angly refracting or isotropic band in myofibrillae.

**idoorgan** (id'lo'rgan) *n* [Gk. *idos* distinct *organon*, instrument.] A purely morphological multicellular unit which does not possess the features of soma.

**ileocaecal** (il'ko'kāl) *n*. [*L. ileum* groin *caecus* blind.] *Part.* ileum and caecum *appl.* fossae, folds.

**ileocolic** (il'ko'kol'ik) *n*. [*L. ileum* groin Gk. *kolon* colon.] *Part.* ileum and colon *appl.* artery lymph-glands.

**Ileum** (il'ēdm) *n*. [*L. ileum* groin] Lower part of small intestine.

**Iliac** (il'ik) *n*. [*L. ilia* flank.] *Part.* ilium, a pelvic bone *appl.* artery fossa, furrow tuberosity vein, etc.; *appl.* muscle iliacus, from upper part of iliac fossa to side of tendon of psoas major *appl.* processes of

- ischiopubic plate forming base for pelvic fins.
- Iliaca dal** (il'akó dāl) *n.* [*L. ilia flanks cauda tail.*] Connecting ilium and tail *appl.* muscle.
- Ilococcyg al** (il'akókaj dāl) *n.* [*L. ilia, flanks Gk. kokkys cuckoo.*] *Peri.* ilium and coxyc *appl.* muscle.
- Ilocostal** (il'akóh dāl) *n.* [*L. ilia flanks; costa, rib.*] In region of ilia and ribs *appl.* several muscles.
- Ilof morai** (il'akóm'órá) *n.* [*L. ilia, flanks femur thigh.*] *Peri.* ilium and femur *appl.* a ligament.
- Ilohypogastrí** (il'akóh'pógás'trík) *n.* [*L. ilia, flanks Gk. hypo under gender stomach.*] *Peri.* ilium and lower anterior part of abdomen *appl.* nerve.
- Ilo-inguinal** (il'akóng'gwinál) *n.* [*L. ilia, flanks inguine, groin.*] In the region of ilium and groins *appl.* nerve.
- Ilo-ischiadic** (il'akókiák'tík) *n.* [*L. ilia, flanks Gk. ischion, hip.*] *Appl.* fenestra between ilium and ischium when these are fused at both ends.
- Iliolumbar** (il'akólm'bár) *n.* [*L. ilia, flanks; lumbus loin.*] In region of ilium and loins *appl.* artery ligament, vein.
- Iliop ctineal** (il'akópéktín dāl) *n.* [*L. ilia, flanks pectus, crest.*] *Appl.* an eminence marking point of union of ilium and pubis *appl.* sacra.
- Iliopsoas** (il'akós'sa, pás'sa) *n.* [*L. ilia flanks Gk. psos, loma.*] Iliacus and psoas major considered as one muscle.
- Iliotibial** (il'akób'tál) *n.* [*L. ilia, flanks tibia, shin.*] *Appl.* tract or band of muscle at lower end of thigh.
- Ilotrochanteri** (il'akótrókántér'tík) *n.* [*L. ilia, flanks Gk. trochanter runner.*] Uniting ilium and trochanter of femur *appl.* a ligament.
- Ilium** (il'úm) *n.* [*L. ilium, flank.*] That part of hip-bone supporting the flank dorsal bone of pelvic arch.
- Iluvial** (ilú vāl) *n.* [*L. ilu into;*
- luere to wash.*] *Appl.* lower soil layers or B horizon.
- Imaginal** (imáj'ínál) *n.* [*L. imago image.*] *Peri.* an imago *appl.* larval discs, patches of cells from which new organs develop.
- Imag** (imáj gó) *n.* [*L. imago image.*] The last or adult stage in insect metamorphosis the perfect insect.
- Imbibition** (im'bíbish'ón) *n.* [*L. im into bibere to drink.*] Absorption of fluids, as of water by roots.
- Imbricat** (im'brikát) *n.* [*L. imbricare to tile.*] Having parts overlapping each other like roof-tiles *appl.* scales, plates, bud-scales, bracts.
- Imitative** (im'ítáiv) *n.* [*L. imitari to imitate.*] *Appl.* form, structure, habit, colouring etc. assumed for protection or aggression.
- Immaculate** (imák'últ) *n.* [*L. im, not macula, spot.*] Without spots marks of different colour.
- Immersive body**—heat-stable antibody or lysin amboceptor *g.s.*
- Immune** (imúnit' im'únit) [*L. immunus free.*] T under invulnerable to toxin, usually by injecting the toxin in small quantities at short intervals, without appearance of severe symptoms.
- Immunity** (imún'ít) *n.* [*L. immunus free.*] An organism resistance, natural or acquired, to the onset of pathological conditions from infection natural or artificial, by micro-organisms or their products.
- Imper** (im'pár) *n.* [*L. imper unequal.*] Not paired not existing in pairs *arygon.*
- Imparidigitat** (im'pár'kój'ház) *n.* [*L. impar unequal digitus finger.*] Having an odd number of digits.
- Imperialianat** (im'pár'tpán'át) [*L. impar unequal pluma, wing.*] Unequally pinnate; pinnate with an odd terminal leaflet.
- Imperfect** (im'pér'fekt) *n.* [*L. im perfectus unfinished.*] Incomplete *appl.* fungi lacking the sexual spore stage.

**Imperforate** (Impēr'fōrāt) *a.* [L. *in* not *per* through *foratus* bored.] Not pierced *appt* foraminiferous shells without fine pores in addition to principal opening.

**Impervious** (Impēr'vīūs) *a.* [L. *in* not *peruus* passable.] Not permeable *appt* nostrils with septum between nasal cavities.

**Implant** (Im'plānt) *n.* [L. *in* into *placere* to plant.] An organ or part transplanted to an abnormal position a graft.

**Implantation** cone—cone of origin, *q.v.*

**Implex** (Im'plēks) *n.* [L. *n* into *plicare* to fold.] Endoplica or infolding of integument for muscle attachment in insects.

**Importation** (Impōrtā'shūn) *n.* [L. *importare* to carry into.] Ingestion by sinking f food into protoplasm of captor as in certain protozoa.

**Impregnati** *n.* (Im'prēgnā'shūn) *n.* [L. *impregnare* to fertilize.] Transference of spermatozoa from male to body of female insemination.

**Impressio** (Impres'iō) *n.* [L. *imprimere* impression] Impression or concavity in one organ or structure where in contact with another as of surface f liver in contact with stomach etc.

**Impuberal** (Impū'b rāl) *a.* [L. *impuber* under age.] Prepubertal sexually immature.

**Impulse** (Im'pūls) *n.* [L. *impulsus* driven.] Self propagated disturbance induced by excitation.

**Inantherate** (Inān'thērāt) *a.* [L. *in* not Gk. *antheros* flowering] Without anthers anantherous.

**Inarticulate** (Inārtīk ūlāt) *a.* [L. *in* not *articulatus* jointed] Not segmented not jointed.

**Inaxon** (Ināk'sōn) *n.* [Gk. *is* fibre *axon* axis.] A nerve-cell with axis-cylinder branching at a distance from it.

**Inbreeding**.—breeding through a succession of parents belonging to the same stock or very nearly related.

**Inca bones**.—distinct portions of Interparietal found in skulls of former Peruvians os interparietale.

**Incaliculate** (Inkālīk ūlāt) *a.* [L. *in* not *caliculus* small flower-cup.] Wanting a calicle.

**Incasement theory**—preformation theory *q.v.*

**Incisal** (Insf'al) *a.* [L. *incidere* to cut into.] Cutting as edge of a tooth.

**Incised** (Insf'ed) *a.* [L. *incisus* cut into.] With deeply notched margin.

**Incisiform** (Insf'ifōrm) *a.* [L. *incisus* cut into *forma*, shape] Incisor-shaped.

**Incisive** (Insf'iv) *a.* [L. *incidere* cut into.] *Pert.* or in region of incisors *appt* bones, foramina fossa.

**Incisor** (Insf'ōr) *a.* [L. *incisus* cut into.] Adapted for cutting—*appt* mammalian premaxillary teeth. *n.* A crest or ridge of palatine process of maxilla.

**Incisura** (Insf'ū rā) *n.* [L. *incidere* to cut into.] Notch, depression, or indentation, as in bone, stomach, liver etc.

**Included** (Inklood'ed) *a.* [L. *includere* to shut in.] Having stamens and pistils not protruding beyond corolla not exserted.

**Inclusion bodies**.—intracellular particles, as pigment granules, mitochondria, Golgi bodies microsome, viruses etc.

**Incomplete metamorphosis**.—insect metamorphosis in which young are hatched in general adult form and develop without quiescent stage.

**Incongruent** (Inkōng'groōnt) *a.* [L. *incongruus* not suiting] Not suitable or fitting *appt* surface of joints which do not fit properly.

**Incoordination** (In'kōōr'dīnā'shūn) *n.* [L. *in* not *cum* together *ordo*, order] Want of co-ordination irregularity of movement due to loss of muscle control.

**Incrassate** (Inkrās'āt) *a.* [L. *incrassare* to thicken.] Thickened becoming thicker.

**Incretion** (Inkrē'shūn) *n.* [L. *in*

- into *crusts* separated.] Internal secretion.
- incrustation** (Inkrustā shūn) *n* [L. *in*, into *crusta*, shell.] Fossilisation by encasement in mineral substance.
- incubati** *n* (In'kūbā shūn) *n* [L. *incubare* to lie on] The hatching of eggs by means of heat, natural or artificial; period between infection and appearance of symptoms induced by parasitic organisms.
- incubatori** *m* ('kūbātū'rīdūm) *n*. [L. *incubare* to lie on.] Temporary pouch surrounding mammary area, in which egg of *Echidna* is hatched.
- incubous** (In'kūbūs) *a*. [L. *incubare* to lie on.] *Appl.* leaves so arranged that the base of each is covered by upper portion of next lower.
- incudal** (In'kūdāl) *n* [L. *incus anvil*.] *Peri.* the *incus appl.* fold, fossa.
- incudate** (In'kūdāt) *a*. [L. *incus anvil*.] *Appl.* type of rotifer mastax with large and hooked ramal and reduced mallel.
- incumbent** (Inkūm'bēnt) *a*. [L. *incumbere* to lie upon.] Lying prone bent downwards to lie along a base *appl.* cotyledons so folded that flat sides are next radicle *appl.* hairs or spines applied lengthwise to their base *appl.* insect wings resting on abdomen.
- incurrent** (Inkūr'ēnt) *s* [L. *in* into *currere* to run.] Leading into afferent *appl.* ectoderm lined canals which admit water in sponges *appl.* inhalant siphons of molluscs.
- incurvate** (Inkūr'vāt) *a*. [L. *incurvus bent*.] Curved inwards or bent back.
- incurvation** (In'kūr'vā shūn) [L. *incurvus* to curve.] The doubling back on itself of structure or organ as of spirochaete about its divide.
- incus** (In'kūs) *n*. [L. *incus anvil*.] Part of rotifer mastax the anvil-shaped ear ossicle of mammals.
- indeciduate** (In dēd'itāt) *a*. [L. *in* not *decidere* to fall down.] Non-caducous with maternal part of placenta not coming away at birth.
- indeciduous** (In dēd'itūs) *a*. [L. *in* not *decidere* to fall down.] Persistent not falling off at maturity everlasting; evergreen.
- indefinite** (Indēf'it) *a*. [L. *in* not *definitus* limited.] Not limited not determinate of no fixed number *racemose &c*
- ind hiscent** (In dēh's ēnt) *s* [L. *in*, or *dehiscere* gaping] Not splitting at maturity *appl.* certain fruits.
- indeterminate growth**,—growth of stem, branch or shoot not limited or stopped by development of a terminal bud; indefinite prolongation and subdivision of an axis.
- indeterminate inflorescence**,—growth of floral axis by indefinite branching because unlimited by development of terminal bud.
- index**,—the forefinger or digit next to the thumb number or formula expressing ratio of one quantity to another
- indicators**,—species characteristic of climatic, soil and other conditions in particular region *s* habitat dominant species in biotope.
- indigenous** (Indj'ēnt) *a*. [L. *indigenus*, native.] Belonging to the locality not imported native.
- individual** (In divīd'itāl) *a*. [L. *in*, not *divisibilis* divisible.] *Peri.* single example or unit, as individual variations of colour *s*. A person or zooid of distinctive function of hydrosan colony
- individualism**,—symbiosis in which the two parties together form what appears to be a single organism.
- individuation**,—development of interdependent functional units, as in colony formation organisation of morphogenetic processes regional or thus differentiation process of developing into an individual.
- indole-acetyl cld**—*see* heteroauxin.
- induced movement**,—movement dictated and influenced by external stimulus, as plant curvature.



- Induction** (Indūkahā) *n* [I *inducere* to lead in.] Act or process of causing to occur process whereby a cell & thus influence neighbouring cells = tissues lowering by one reflex of the threshold of another spinal induction.
- Inductive stimulus**—an external stimulus which influences growth = behaviour of an organism.
- Indumentum** (In dūmēntum) *n*. [L. *indumentum* covering] The plumage of birds a hairy covering
- Induplicate** (Indū pīkāt) *a*. [L. *in* in *duplex* double] In vernation having bud-leaves bent or rolled without overlapping in aestivation having bud sepals or petals folded inwards at points of contact.
- Induplicate** (Indū pīkāt) *a*. [L. *in* in *duplex* double.] Appl. vernation = aestivation with induplicate foliage or floral leaves respectively
- Indusial** (Indū štīl) *a*. [L. *inducere* to put on.] Containing larval insect cases, as certain limestones *port* the indusium.
- Indusiate** (Indū štīl) *a*. [L. *inducere* to put on.] Having an enveloping case *appl.* insect larvae having an indusium.
- Indusiform** (Indū štīlrm) *a*. [L. *inducere* to put on *forma*, shape] Resembling an indusium.
- Indusium** (Indū štīlrm) *n*. [L. *inducere* to put on.] An outgrowth of plant epiderm covering and protecting a sorus an insect larva case with supracallosal gyrus of the rhinocephalon, indusium gnaeum.
- Indusiae** (Indū štīl) *n pl.* [L. *inducere* to put on.] Scale-leaves leaves which remain attached to stem after withering
- Induviate** (Indū štīl) *a*. [L. *inducere* to put on.] Covered with scale-leaves or indusiae
- Inequilateral** (Inēk'wīlāt'ērl) *a*. [L. *in*, not *aequus* equal *latus* side.] Having two sides unequal having unequal portions on either side of line drawn from umbo to gape of bivalve shell.
- Inequilobate** (Inēk'wīlōbat) *a*. [L. *in* not *aequus* equal *lobus* lobe.] With lobes of unequal size.
- Inequivalve** (Inēk'wīvāl) *a*. [L. *in*, not *aequus* equal *valve* folding doors.] Having two valves of shell unequal *appl.* mollusca.
- Inerm** (Inērm) *a*. [L. *inermis* unarmed.] Without means of defence and offence without spines incrimous.
- Inert** (Inērt) *a*. [L. *inertis* inactive.] Physiologically inactive; *appl.* heterochromatic region of chromosome with paucity of active genes.
- Inferior** (Inf'ērīor) *a*. [L. *inferior* lower] Appl. lower placed of two, further down axis growing or arising below another organ.
- Inferoanterior** (Inf'ērōānt'ērīor) *a*. [L. *inferus* beneath *anterior* in front.] Below and in front.
- Inferobranchiate** (Inf'ērōbrān'kīāt) *a*. [L. *inferus* beneath Gk. *branchia* gills.] With gills under margin (mantle as in certain mollusca).
- Inferolateral** (Inf'ērōlāt'ērl) *a*. [L. *inferus* beneath *latus* side.] Below and at or towards the side.
- Inferomedian** (Inf'ērōmēdīān) *a*. [L. *inferus* beneath *medius* middle.] Below and about the middle.
- Inferoposterior** (Inf'ērōpōst'ērīor) *a*. [L. *inferus* beneath *posterior* behind.] Below and behind.
- Inferoradial** (Inf'ērōrādīāl) *a*. [L. *inferus* beneath *radius* radius.] Lower part of transversely bisected radials of certain fossil crinoids.
- Inflexed** (Inflēk'ted) *a*. [L. *inflexare* to bend in.] Curved or abruptly bent inwards towards the axis; inflexed.
- Inflorescence** (In flōrt's'ēns) *n* [L. *inflorescere* to begin to blossom.] A flowering or putting forth blossoms method in which flowers are arranged on an axis.
- Influx** (In'flōōēns) *n pl.* [L. *influxare* to flow int.] The animals present in plant community or those primarily dependent and acting upon the dominant plant species.
- Infra-axillary** (Inf'rāāksīlārī) *a*. [L.

- infra* below *axilla*, armpit.]  
Branching off below the axil.
- infrabasal** (in'frābā'sāl) *n.* [*L. infra* below *basis* base.] One of series of plates, perradial in position, below the basals in crinoids.
- infrabranchial** (in'frābrāng'kiāl) *a.* [*L. infra*, below *branchiae* gills.] Below the gills *appl.* part of pallial chamber
- infracentral** (in'frātsēn'trāl) *a.* [*L. infra*, below *centrum* centre.] Below vertebral centrum.
- infraclavicle** (in'frāklāv'ikl) *n.* [*L. infra*, below *clavicula*, little key] Membrane bone occurring in pectoral girdle of some fishes.
- infraclavicular** (in'frāklāv'iklār) *a.* [*L. infra*, below *clavicula*, small key] Beneath the clavical *appl.* branches of brachial plexus *appl.* fossa or triangle between deltoid and pectoralis major
- infracortical** (in'frākōr'tiāl) *a.* [*L. infra*, below *cortex* bark.] Beneath the cortex.
- infracostal** (in'frākōs'tāl) *a.* [*L. infra*, below *costa*, rib.] Beneath the ribs *appl.* muscles.
- infradentary** (in'frādēn'tārī) *a.* [*L. infra*, below; *dens* tooth.] Beneath the dentary bone.
- infraglenoid** (in'frāglē'noid) *a.* [*L. infra*, below *Gk. glenon* socket *oides* like.] Below glenoid cavity *appl.* tuberosity
- infrathyoid** (in'frāthi'oid) *a.* [*L. infra*, below *Gk. hyoides* Y-shaped.] Beneath the hyoid *appl.* muscles.
- infralabial** (in'frālā'bīāl) *a.* [*L. infra* below *labium* lip.] Beneath the lower lip
- inframarginal** (in'frāmār'jīnāl) *a.* [*L. infra*, below *margo* margin.] Under the margin, or marginal structure *appl.* a cerebral convolution *appl.* certain plates on carapace of Chelonia below marginals *appl.* lower of two series of plates round margin of stelleroid arms and discs
- inframaxillary** (in'frāmākōl'ārī) *a.* [*L. infra* below *maxilla*, jaw] Beneath maxilla *appl.* nerves.
- infranasal** (in'frānās'āl) *n.* [*L. infra* below *nasus* nose.] An additional nasal element in some Theromorphs.
- intraorbital** (in'frāōr'bēāl) *a.* [*L. infra* below *orbis* circle.] Beneath the orbit *appl.* artery canal foramen, groove nerve glands, etc.
- intrapatellar** (in'frāpātēl'ār) *a.* [*L. infra*, below *patella*, knee-cap.] *Appl.* pad of fat beneath patella.
- infrarostral** (in'frārōs'trāl) *a.* [*L. infra*, below *rostrum* snout.] Beneath a rostrum *appl.* paired cartilages derived from Meckel's cartilage, of lower part of buccoral mouth of tadpoles.
- infrascapular** (in'frāskāp'ulār) *a.* [*L. infra*, below *scapula*, shoulder blade.] Beneath the scapula *appl.* artery
- infraspacific** (in'frāspēs'ifik) *a.* [*L. infra*, below; *species* particular kind.] Part. a subdivision of a species, as subspecies and varieties.
- intraspinatus** (in'frāspīnāt'ūs) *a.* [*L. infra* below *spina*, spine.] Beneath the spine beneath scapular spine *appl.* muscle, fossa
- intrasporous**
- infrastapedial** (in'frāstāpē'diāl) *a.* [*L. infra* below *stapes* stirrup.] Beneath stapes of ear *appl.* part of columella.
- infrasternal** (in'frāstēr'nāl) *a.* [*L. infra*, below *sternum* breast-bone.] Below the breast-bone *appl.* notch superficially at lower end of sternum.
- infratemporal** (in'frātēm'pōrāl) *a.* [*L. infra* below *tempus*, temples.] Beneath the temporal bone *appl.* crest and fossa.
- infratrochlear** (in'frātrōklē'ār) *a.* [*L. infra*, below *trochlea* pulley] Beneath the trochlea *appl.* nerve given off from nasociliary nerve.
- infructescence** (in'fruktēs'sēn) *n.* [*L. in* into; *fructus* fruit.] An inflorescence matured into fruit; composite or confluent fruit.

- infundibular** (ɪ ˈfʌndɪbʊlər) *a.* [*L. infundibulum* funnel] Funnel-shaped *appt* an abdominal muscle *appt* corolla infundibuliform choanoid, *q.v.* *part* infundibulum.
- infundibulla** (ɪnˈfʌndɪbʊlə) *n.* [*L. infundibulum* funnel.] An extract of posterior pituitary lobe causing decrease in renal water excretion antidiuretic infundin.
- infundibulum** (ɪnˈfʌndɪbʊlə) *n.* [*L. infundibulum* funnel.] Any funnel shaped organ *||* structure *appt* part of brain, of ethmoid bone of right ventricle etc. *a* cephalopod siphon *part* of bird's oviduct, flattened stomach-like cavity of ctenophore *septal* funnel in Scyphozoa.
- infusate** (ɪnˈfʊsət) *a.* [*L. in infusus* dark.] Tinged to appear dark as insect wings.
- infusoriform** (ɪ ˈfʊsə rɪfɔrm) *a.* [*L. infusus* poured in *forma* shape.] Resembling an infusorian *appt* embryonic forms of Coelentera *appt* male form of Dicyemidae.
- infusorigen** (ɪnˈfʊsə rɪən) *n.* [*L. infusus* poured into *gens* offspring.] A gastrula-like phase in development of certain Mesozoa.
- ingest** (ɪnˈdʒɛst) *v.* [*L. ingestus* taken in.] To convey food material into the alimentary canal *food-cavity*
- ingesta** (ɪnˈdʒɛstə) *n. pl.* [*L. ingestus* taken in.] The sum-total of substances taken in by the body *Opp* egesta.
- ingestion** (ɪnˈdʒɛstən) *n.* [*L. ingestus* taken in.] The swallowing or taking in of food-material
- ingl. vis** (ɪnˈɡlɔvɪs) *n.* [*L. ingluvis* crop] The crop of bird *dilatation* of oesophagus the rumen.
- inguinal** (ɪnˈɡwɪnəl) *a.* [*L. inguina*, groin.] In region of groin.
- inguinal ring** — *see* abdominal ring
- inguino-abd. minal.** — in region of abdomen and groin.
- inguino-crural** — in region of groin and leg
- inhalant** (ɪnˈhælənt) *a.* [*L. in into* *halare* to breathe] Adapted for inspiring or drawing in as terminal pores of incurrent canals in sponges, *||* siphons in molluscs.
- inhibition** (ɪnˈhɪbɪʃən) *n.* [*L. inhibere* to prohibit.] Prohibition or checking of an action or process.
- inhibitory** (ɪnˈhɪbɪtəri) *a.* [*L. inhibere* to prohibit.] *Appt* nerves which control movement or secretion.
- inion** (ɪnˈɪən) *n.* [*Gk. inion* back of head.] The external protuberance of occipital bone.
- initial** (ɪnɪʃəl) *n.* [*L. incipere*, beginning] A cell which initiates differentiation *||* tissues, as in apical meristem, vascular cambium, etc. histogen cell primordial cell.
- ink sac** — in Sepia, a pear-shaped body in wall of mantle cavity which contains the ink gland secreting a black substance, ink or sepia, ejection of which is means of defence.
- innat** (ɪnˈnæt) *a.* [*L. in in* *genuit* born.] Inherited *beastified* *appt* another with filament attached only to base.
- innervation** (ɪnˈnɛrəvəʃən) *n.* [*L. in into* *nervus* sinew.] Nerve-distribution *vital* nerve force.
- innodulation** (ɪnˈnɒdʒəlɪʃən) *n.* [*L. in into* *nodus* nest.] Colonisation or development of cells or organisms in part of the body *||* which they have been transferred by metastasis *q.v.*
- innominate** (ɪnˈnɒmɪnət) *a.* [*L. in, not nomen* name.] Nameless *appt* various arteries and veins.
- innominate bo.** — the hip-bone or lateral half of pelvic girdle *||* of coxae *||* innominatum.
- innovation** (ɪnˈɒvəʃən) *n.* [*L. innovare* to renew.] A growth or shoot of mosses which develops into a new plant by dying-off of portion of parent plant behind *||* basal vegetative shoot of grasses.
- inocoma** (ɪnˈkɒmə) *n.* [*Gk. in fibre* *homon*, clause.] Portion of muscle fibril between telophragmata or Z discs *||* inokoma sarcomere.

inocular (in'ok'ulär) *n.* [L. *in* 1 to *oculus*, eye.] *Appl.* antennae inserted close to eye.

inocyte (in'ötsi) *n.* [Gk. *is* fibre; *kytos* hollow.] Elongated cell of fibrous tissue.

inogen (in'öjen) *n.* [Gk. *is* fibre; *gennao* offspring.] A nitrogenous substance of muscle tissue.

inophragma (in'öfräg'mä) *n.* [Gk. *is* fibre *phragma* fence.] The transverse membrane through adjacent myofibrillae mesophragma and telophragma. M and Z lines bisecting A and I-discs.

inosit l.—carbohydrate present in cells, the lipotropic anti-alopecia factor of bios, *q.v.*  $C_6H_{12}O_6$ .

inotagmata (in'ötäg'mätä) *n.* *plur.* [Gk. *is* fibre *tagma*, arrangement.] Hypothetical units, *q.v.*

inquiline (in'kwilīn) *n.* [L. *inquilinus* tenant.] Animal living in home of another and getting share of its food. partner in commensalism. an insect developing in gall produced by an insect of another species, being detrimental to the latter.

inscriptions, *i* *dis* na, — three fibrous bands crossing the rectus abdominis muscle.

insectivorous (in'sektiv' rūs) *n.* [L. *insectum*, cut into *verm* to devour.] Insect-eating *appl.* certain animals and carnivorous plants.

insemination (in'seminā'shōn) *n.* [L. *in*, in *seminare* sowing.] The introduction of semen or spermatozoa into female genital tract.

inserted (in'sert'ed) *n.* [L. *in*, in *serere* to join.] United by natural growth.

insertion (in'sert'shōn) [L. *inserere* joined.] Point of attachment of organs, as of muscles leaves. point on which force of muscle is applied.

insertional, — *appl.* translocation in which the portion between two breaks of chromosome is transferred to break in another chromosome of shift.

inseosorial (in'seō'siäl) *n.* [L. *in-*

*sider* to sit *pon*] Adapted for perching.

*i* *l*stent (in'st'ent) *n.* [L. *instare* to stand upon.] *Appl.* hind toe of certain birds whose tip only reaches the ground.

insolation (in'sölä'shōn) *n.* [L. *in* into; *sol* sun.] Exposure to sun's rays.

inspiration (in'spirā'shōn) *n.* [L. *in* *spirare* to inhale.] The act of drawing air into the lungs absorption of oxygen by plants.

instaminate (in'stām'inä) *n.* [L. *in* not *stamen* thread.] Not bearing stamens.

instar (in'stär) *n.* [L. *instar* form.] Insect at particular stage between moults.

insula (in'sülä) *n.* [L. *insula* island.] Island of Reil, triangular eminence lying deeply in lateral fissure of temporal lobe. islet of Langerhans, *q.v.* blood island, *q.v.*

insulin (in'sülīn) *n.* [L. *insula* island.] The anti-diabetic endocrine product of pancreas, formed in  $\beta$ -cells of islets of Langerhans  $C_{48}H_{80}O_{34}N_{12}S \cdot 3H_2O$ .

integerrifolius (intēg'rif'ölīs) *n.* [L. *integer* whole *folium* leaf.] With entire leaves.

integripallial (intēg'rīpāl'iäl) *intēg'rīpāl'iēs* *n.* [L. *integer* whole *pallium* mantle.] Having an unbroken pallial line *appl.* shells of molluscs with small or no siphons.

*i* *i* *g*ument (intēg'rūmēt) *n.* [L. *integumentum* covering.] A covering investing or coating structure or layer. coat of ovule; integumentum.

interacinae (in'tēräs'inās) *n.* [L. *inter* between; *acinus* grape.] Among alveoli of mucous gland interacina.

interalveolar (in'tēräl'völār) *n.* [L. *inter* among *alveolus* small cavity.] Among alveoli *appl.* cell islets.

interamb (in'tērāmb) *n.* [L. *inter* between *ambulare* to walk.] Interambulacral area.

**Interambulacral** (in'tērāmbulā'krāl) *a.* [L. *inter* between *ambulacra* *i.* walk.] *Appl.* area of echinoderm test between two ambulacral areas.  
*n.* A plate of that area.

**Interambulacrum** (in'tērāmbulā'krīm) *n.* [L. *inter* between *ambulacra* *i.* to walk.] The area between two ambulacral areas.

**Interarticular** (in'tērārtik'ulār) *a.* [L. *inter* between *articulus* joint.] Between articulating parts of bones *appl.* certain ligaments and fibrocartilages.

**Interatrial** (in'tērā'triāl) *a.* [L. *inter* between *atrium* hall.] *Appl.* groove separating the two atria of the heart.

**Interauricular** (in'tērā'urik'ulār) *a.* [L. *inter* between *auricula*, little ear] Between ridges of heart.

**Interaxillary** (in'tērāk'silār) *a.* [L. *inter* between *axilla* armpit] Placed between the axilla.

**Interbrachial** (in'tērbrā'kiāl) *a.* [L. *inter* between *brachium* arm] Between arms, rays, or brachial plates.

**Interbranchial** (in'tērbrāng'kiāl) *a.* [L. *inter* between *branchiae* gills.] *Appl.* septum between successive gill slits.

**Interbreed** (in'tērbrēd') *v.* [L. *inter* between A.S. *brēd* breed] To cross different varieties of plants or animals.

**Intercalare** (in'tērkal'ārē) *a.* [L. *intercalare* inserted.] In many fishes and fossil amphibians an additional element in the vertebra.

**Intercalarium** (in'tērkal'ārīm) *n.* [L. *intercalare* inserted.] The third Weberian ossicle.

**Intercalary** (in'tērkal'ārī in'tēr'kalārī) *a.* [L. *intercalare* inserted.] Inserted additional *appl.* meristic layers between masses of permanent tissue *appl.* growth elsewhere than at growing point *appl.* veins between main veins of insect wings *appl.* plates in Dinoflagellata *appl.* bands in diatoms *appl.* cartilage between neural arches, interneural or interdorsal plate

**Inter capitular** (in'tērkapit'ulār) *a.* [L. *inter* between *capitulum* little head.] Between capitula *appl.* veins of fingers and toes.

**Inter carotid** (in'tērkarōt'id) *a.* [L. *inter* between; Gk. *karos* deep sleep.] Between carotid arteries.

**Inter carpal** (in'tērkar'pāl) *a.* [L. *inter* between *carpus* wrist.] Among or between carpal bones *appl.* joints.

**Inter carpellary** (in'tērkar'pēlārī) *a.* [L. *inter* between Gk. *karpos* fruit.] Between the carpels.

**Inter cartilaginous** (in'tērkartilāj'ins) *a.* [L. *inter* between *cartilago* gristle.] Between cartilages.

**Inter cavernous** (in'tērkar'vērns) *a.* [L. *inter* between *caverna* cavern.] *Appl.* sinuses connecting cavernous sinuses, part of ophthalmic veins.

**Inter cellular** (in'tērāl'silār) *a.* [L. *inter* between; *cellula* little cell.] Among or between cells, as spaces in meristem, biliary passages among liver-cells plexus of dendrites between sympathetic ganglion cells, etc.

**Inter central** (in'tērēn'trāl) *a.* [L. *inter* between *centrum* centre.] Uniting or between, two centra.

**Inter centrum** (in'tērēn'trūm) *a.* [L. *inter* between *centrum* centre.] A second central ring in an embolomeres vertebra.

**Inter change**, ~mutual or reciprocal translocation, in chromosomes.

**Inter chondral** (in'tērkhōn'drāl) *a.* [L. *inter* between Gk. *chondros* cartilage.] *Appl.* articulations and ligaments between costal cartilages.

**Inter clingular** (in'tērīng'gūlār) *a.* [L. *inter* between *cingulum* girdle.] *Appl.* area of longitudinal groove between parts of a spiral girdle in certain Dinoflagellata.

**Inter clavicle** (in'tērklāv'ikl) *a.* [L. *inter* between *clavicula* small key] The episternum, median ventral bone between clavicles.

**Inter clavicular** (in'tērklāv'ikāl) *a.* [L. *inter* between *clavicula*, small key] Between the clavicles *appl.* a ligament.

**interclinoid** (In'tērklī'nōid) [*L. inter* between Gk. *kline* bed; *oides* form.] Joining clinoid processes *appl.* fibrous process or ligament.

**intercolumnar** (In'tērklōm'āl) *a.* [*L. inter* between *columna*, column.] Between columnar structures, as certain abdominal muscle fibres.

**intercondyloid** (In'tērkon'diloid) *a.* [*L. inter* between Gk. *condylus* knob *oides* form.] Between condyles *appl.* an eminence of tibia, and fossae of femur and tibia.

**intercostal** (In'tērko'stāl) *a.* [*L. inter* between *costa*, rib.] Between the ribs, as arteries, glands, membranes, nerves, veins, muscles between ribs of leaf maricarp etc.

**intercostobrachial** (In'tērko'stōbrā'kiāl) *a.* [*L. inter* between *costa* rib *brachium* arm.] *Appl.* lateral branch of second intercostal nerve which supplies upper arm intercostohumeral.

**intercostal** (In'tērko'stāl) *a.* [*L. inter* between *costa*, hip.] Between the coxae or proximal limb-joints of arthropods *appl.* plate, etc.

**intercrescence** (In'tērkrēs'tsē) *a.* [*L. inter* between *crescere* to grow] A growing into each other as of thorns.

**intercrural** (In'tērkrō'sāl) *a.* [*L. inter* between *crus* leg] *Appl.* intercolumnar tendinous fibres arching across external oblique muscles.

**intercuneiform** (In'tērknē'fōrm) [*L. inter* between *cuneus* wedge *forma*, shape] Connecting the three cuneiform bones of the ankle *appl.* articulations and ligaments.

**interdeferential** (In'tērdefērēn'shāl) *a.* [*L. inter* between *deferre* to carry down.] Between the vasa deferentia.

**interfascicular** (In'tērfa'sik'ulār) *a.* [*L. inter* between *fasciculus* small bundle.] Situated between the fascicles or vascular bundles; *appl.* cambium

**interfemoral** (In'tērēm'ōrāl) *a.* [*L. inter* between *femur* thigh bone.] Between the thighs.

**interferace** (In'tērēr'ās) *a.* [*L. inter* between *ferire* to strike.] The lessened probability of crossing over in the neighbourhood of previous crossing-over.

**interfertile** (In'tērfer'til) *a.* [*L. inter* between *fertilis* fertile.] Able to interbreed.

**interfilamentar** (In'tērfilāmēn'tār) *a.* [*L. inter* between; *F. filamentum* from *L. filum*, thread.] *Appl.* junctions or horizontal bars connecting molluscan gill filaments.

**interfilar** (In'tērfilār) *a.* [*L. inter* between *filum*, thread.] *Appl.* ground-substance of protoplasm, as opposed to reticulum.

**interfoliaceous** (In'tērfoli'āsēs) *a.* [*L. inter* between *folium*, leaf.] Situated or arising between two opposite leaves *interfoliar*.

**interfrontal** (In'tērfrōn'tāl) *a.* [*L. inter* between *frons* forehead.] An unpaired median bone between frontals and nasals in Eryops.

**interganglionic** (In'tērgāngliōn'ik) *a.* [*L. inter* between Gk. *ganglion* little tumour] Connecting two ganglia, as nerve cords or strands.

**intergeneri** (In'tērjēnēr'ik) *a.* [*L. inter* between *genus* kind.] Between genera; *appl.* hybridisation.

**intergenital** (In'tērjēn'tāl) *a.* [*L. inter* between *genitus* produced.] Between the genitalia *appl.* certain echinoderm plates.

**interglacial** (In'tērglā'sāl) *a.* [*L. inter* between *glacies* ice.] *Appl.* or *perit.* ages between glacial ages, particularly of the Pleistocene epoch.

**interglobular** (In'tērglob'ulār) *a.* [*L. inter* between *globulus* small globe.] *Appl.* series of spaces towards outer surface of dentine due to imperfect calcification.

**intergular** (In'tērgū'lār) *a.* [*L. inter* between *gula* gullet.] A paired or unpaired plate in front of gulars in Chelonia.

**Interhyal** (i tēr'hī'āl) *n* [L. *inter* between Gk. *hyoides* Y-shaped] A small bone between hyomandibular and rest of hyoid of some higher vertebrates.

**Interkinesis** (in'tērkhīnē'is) *n*. [L. *inter* between Gk. *kinesis* movement.] Interphase resting stage between two mitotic divisions of a cell.

**Interlamellar** (in tēr'lāmē'ār) *a*. [L. *inter* between *lamella* thin plate.] *Appl* vertical bars of tissue joining gill lamellae of molluscs *appl* spaces between lamellae or gills of agarics.

**Interlaminar** (in'tēr'lām'īnār) *a* [L. *inter* between *lamina* thin plate.] Unit glaminae between laminae.

**Interlobar** (i tēr'lobār) *a*. [L. *inter* between L.L. *lobus* lobe] Between lobes *appl* sulci and fissures dividing cerebral hemispheres into lobes.

**Interlobular** (in'tēr'lob'ulār) *a*. [L. *inter* between *lobulus* small lobe.] Occurring between lobules *appl* kidney arteries, vessels of liver etc.

**Interlocular** (in tēr'lok'ulār) *a*. [L. *inter* between *loculus* compartment.] Between loculi.

**Interloculus** (in'tēr'lok'ulūs) *n* [L. *inter* between *loculus* compartment.] Space between two loculi.

**Intermandibular** (in'tēr'māndīb'ulār) *a*. [L. *inter* between *mandibula* jaw] Between rami of mandibles.

**Intermaxilla** (in'tēr'māk'sī'lā) *n* [L. *inter* between *maxilla* jaw] Bone between maxillae the pre maxilla.

**Intermaxillary** (in'tēr'māk'sī'lārī) *a*. [L. *inter* between *maxilla*, jaw] Between maxillae *part* pre maxillae *appl* gland in nasal septum of certain amphibians and reptiles.

**Intermediary** (in'tēr'mē'diārī) *a*. [L. *inter* between *medius* middle.] Acting as medium *appl* nerve cells receiving impulses from afferent cells and transmitting them to efferent cells.

**Intermediate** (in'tēr'mē'diāt) *a*. [L. *inter* between *medius* middle] Occurring between two points or parts *appl* a nerve-mass, certain areas of brain, a disc in striated muscle ribs, etc.

**Intermedial** host,—host intervening between two others in life-history of certain parasites, as *Lumbricus* in life-history of *Fasciola*.

**Intermedia** (in'tēr'mē'diā) *n* [L. *inter* between *medius* middle.] Hormone obtained from pars intermedia of the pituitary gland B substance.

**Intermedium** (in'tēr'mē'diūm) *n*. [L. *inter* between *medius* middle.] A small bone of carpus and tarsus.

**Intermesenteric** (in'tēr'mēs'ēntēr'ik, mēs) *a*. [L. *inter* between Gk. *mesos* middle *enteron* gut.] Occurring between mesenteries *appl* spaces in sea-anemones.

**Intermitotic** (in'tēr'mitō'tik) *n*. [L. *inter* between Gk. *mitos* thread.] A cell with individual life between mitoses causing its origin and division into daughter cells of postmitotic.

**Intermuscular** (in'tēr'mūs'kulār) *a*. [L. *inter* between *musculus* muscle.] Between or among muscle fibres.

**Intermuscular** (in'tēr'mūs'kulār) *a*. [L. *inter* between Gk. *mys* muscle *temno* cutting] *Appl* vertebra formed of caudals of one somite and cranials of next posterior of intrasegmental.

**Internal** (intēr'nāl) *a*. [L. *internus* within.] Located on inner side nearer middle axis located or produced within.

**Internal secretion**,—endocrine secretion hormone.

**Internal spiral**,—coil within single chromatid as between prophase and anaphase.

**Int nasal** (in'tēr'nāl zāl) *a*. [L. *inter* between *naris* nose.] Between nostrils *appl* plate septum, gland.

- interneural** (in'térnū rāl) *n.* [L. *inter* between Gk. *neurōn* nerve.] Between neural processes, arches or spines *appl.* sharp bones attached to dorsal fin rays *appl.* intercalary cartilages.
- interneuron** (in'térnū rān) *n.* [L. *inter* between Gk. *neurōn* nerve.] An interuncial neurone or relay cell.
- internodal** (in'térnō dāl) *n.* [L. *inter* between *nodus* knot.] *Part.* part between two nodes.
- internode** (in'térnōd) *n.* [L. *inter* between *nodus* knot.] The part between two successive nodes or joints, as of plant stem, of medullated nerve fibre non-genetic segment of chromosome.
- internodia** (in'térnō diā) *n. pl.* Phalanges.
- intern** (in'tér'nūm) *n.* [L. *internus* inward.] Inner region or medulla of a mitochondrion or of Golgi apparatus.
- interuncial** (in'térnū sāl) *n.* [L. *inter* between *unus* messenger.] Intercommunicating as paths of transmission or nerve fibres *appl.* neurones interposed between afferent and efferent nerve cells, association neurone.
- interceptor** (in'térsep'tō) *n.* [L. *inter* between *capere* to take.] A receptor which receives stimuli from within the body end-organ for visceral sensibility.
- interocular** (in'térōk ūlār) *n.* [L. *inter* between *oculus* eye.] Placed between the eyes.
- interoperculum** (in'térōp'érkŭlŭm) *n.* [L. *inter* between *operculum* lid.] A membrane bone of operculum of Teleostean and Dipnoi, attached to movable interopercle.
- interoptik** (in'térōp'tik) *n.* [L. *inter* between Gk. *optikos* part sight.] Between optic lobes.
- interorbital** (in'térōb'itāl) *n.* [L. *inter* between *orbis* circle.] Between the orbits *appl.* septum of trophoblastic skull, *appl.* sinus.
- interosculant** (in'térōskŭlānt) *n.* [L. *inter* between *osculari*, to kiss.]

- Possessing characters common to two or more groups or species.
- interosseous** (in'térōs'ēŭs) *n.* [L. *inter* between *os* bone.] Occurring between bones *appl.* arteries, membranes muscles, nerves.
- interparietal** (in'térpār'itāl) *n.* [L. *inter* between *paries* wall.] In many vertebrates a bone arising between parietals and supra-occipital.
- interpeduncular** (in'térpēdŭng'kŭlār) *n.* [L. *inter* between; *pedunculus* little foot.] *Appl.* fossa between cerebral peduncles, and a ganglion.
- interpetaloid** (in'térpēt'āloīd) *n.* [L. *inter* between Gk. *petalon*, leaf *eidos* (form).] Between petaloid areas of an echinoderm test.
- interpetiolar** (in'térpēt'īōlār) *n.* [L. *inter* between *petiolus* little foot.] Situated between petioles or bases of opposite leaves.
- interphalangeal** (in'térfālānj'ēl) *n.* [L. *inter* between Gk. *phalanx* line of battle.] *Appl.* articulations between successive phalanges.
- interphase** (in'térfāz) *n.* [L. *inter* between Gk. *phasis* aspect.] Resting stage between first and second mitotic divisions *inter* kinesis.
- interplacental** (in'térplāsēnt'āl) *n.* [L. *inter* between *placenta*, flat cake.] Between placentae.
- interplural** (in'térploō rāl) *n.* [L. *inter* between Gk. *pluron* side.] Between pleurae.
- interpositional growth**,—of cells by interposition between neighbouring cells without loss of contact intrusive growth. *Opp.* sliding growth.
- interpul** (in'térpŭl'bŭk) *n.* [L. *inter* between *pulvis* mature.] *Appl.* the fibrocartilaginous lamina between pulvic bones.
- interracial** (in'tér rā sāl) *n.* [L. *inter* between *radix* root.] Between races or breeds *appl.* hybridization differences, etc.
- interradial** (in'tér rā diāl) *n.* [L. *inter* between; *radius* radius.] *Part* an interradius.



**interhyal** (in'tēr'hī'āl) *n.* [*L. inter* between *Gk. hyarides* T-shaped.] A small bone between hyomandibular and rest of hyoid of some higher vertebrates.

**interkinesis** (in'tēr'kīnē'sis) *n.* [*L. inter* between *Gk. kinesis* movement.] Interphase resting stage between two mitotic divisions of a cell.

**interlamellar** (in'tēr'lāmē'lār) *a.* [*L. inter* between *lamella* thin plate.] *Appl.* vertical bars of tissue joining gill lamellae of molluscs *appl.* spaces between lamellae or gills of agarics.

**interlaminar** (in'tēr'lām'īnār) *a.* [*L. inter* between *lamina* thin plate.] Uniting laminae between laminae.

**interlobar** (in'tēr'lob'ār) *a.* [*L. inter* between *L.L. lobus* lobe.] Between lobes *appl.* sulci and fissures dividing cerebral hemispheres into lobes.

**interlobular** (in'tēr'lob'ulār) *a.* [*L. inter* between *lobulus* small lobe.] Occurring between lobules *appl.* kidney arteries, vessels of liver etc.

**interocular** (in'tēr'ok'ulār) *a.* [*L. inter* between *oculus* compartment.] Between oculi

**interoculus** (in'tēr'ok'ulūs) *n.* [*L. inter* between *oculus* compartment.] Space between two oculi.

**intermandibular** (in'tēr'māndīb'ulār) *a.* [*L. inter* between *mandibula* jaw.] Between rami of mandibulae.

**intermaxilla** (in'tēr'māksī'l'ā) *n.* [*L. inter* between *maxilla* jaw.] Bone between maxillae the premaxilla.

**intermaxillary** (in'tēr'māksī'l'ārī) *a.* [*L. inter* between *maxilla* jaw.] Between maxillae *part.* premaxillary *appl.* gland in nasal septum of certain amphibians and reptiles.

**intermediary** (in'tēr'mē'dī'ārī) *a.* [*L. inter* between *medius* middle.] Acting as medium *appl.* nerve-cells receiving impulses from afferent cells and transmitting them to efferent cells.

**intermediate** (in'tēr'mē'dī'āt) *a.* [*L. inter* between *medius* middle.] Occurring between two points or parts *appl.* a nerve-mass, certain areas of brain, a disc in stratified muscle ribs, etc.

**intermediate host**,—host intervening between two others in life-history of certain parasites, as *Limnaea* in life history of *Fasciola*.

**intermedia** (in'tēr'mē'dī'n) *n.* [*L. inter* between *medius* middle.] Hormone obtained from pars later media of the pituitary gland B substance.

**intermedium** (in'tēr'mē'dī'm) *n.* [*L. inter* between *medius* middle.] A small bone of carpus and tarsus.

**intermesenteric** (in'tēr'mēs'entēr'ik) *a.* [*L. inter* between *Gk. mesos* middle *enteron* gut.] Occurring between mesenteries *appl.* spaces in sea-anemones.

**intermitotic** (in'tēr'mītō'tik) *n.* [*L. inter* between *Gk. mitos* thread.] A cell with individual life between mitoses causing its origin and division into daughter cells of postmitotic.

**intermuscular** (in'tēr'mūs'kulār) *a.* [*L. inter* between *musculus* muscle.] Between or among muscle fibres.

**interymyotomic** (in'tēr'mī'ōtō'mik) *a.* [*L. inter* between *Gk. my* muscle *temno* cutting.] *Appl.* vertebra formed of caudals of one somite and cranials of next posterior of intersegmental.

**internal** (in'tēr'nāl) *a.* [*L. internus* within.] Located on inner side; nearer middle axis; located or produced within.

**internal secretion**,—endocrine secretion hormone.

**internal spiral**,—coil within a single chromatid, as between prophase and anaphase.

**internasal** (in'tēr'nāl'zāl) *a.* [*L. inter* between *nasus* nose.] Between nostrils *appl.* plate septum gland.

- Intertergal** (Intēr'tēr gāl) *a.* [L. *inter* between *tergum* back.] Between tergites or dorsal sclerites.
- Intertidal** (Int'ēr'tī'dāl) *a.* [L. *inter* between A.S. *tīd*, *tīma*.] *Appl.* shore organisms living between high- and low-water marks.
- Intertrabecula** (Int'ēr'trābēk'ulā) *a.* [L. *inter* between *trabecula* little beam.] A separate plate between the trabeculae anteriorly in some birds.
- Intertragal** (Int'ēr'trāj'īk) *a.* [L. *inter* between Gk. *tragos* goat.] *Appl.* notch between tragus and antitragus.
- Intertrochanteric** (Int'ēr'trōkāntēr'īk) *a.* [L. *inter* between Gk. *trochanter* runner.] Between trochanters *appl.* crest, line.
- Intertrochlear** (Int'ēr'trōk'lēār) *a.* [L. *inter* between *trochlea*, pulley] *Appl.* an ulnar ridge fitting into groove of the humerus.
- Intertubercular** (Int'ēr'tūbēr'kulār) *a.* [L. *inter* between *tuberculum* small hump] *Appl.* plane of body through tubercles of iliac crests, *appl.* sulcus between tubercles of humerus.
- Intervarietal** (Int'ēr'vār'ētāl) *a.* [L. *inter* between; *varius* diverse.] *Appl.* crosses between two distinct varieties f a species.
- Interventricular** (Int'ēr'vēntēr'īk'ulār) *a.* [L. *inter* between *ventriculus* small cavity] Between ventricles *appl.* foramen between third and lateral ventricles foramen of Monro.
- Intervertebral** (Int'ēr'vēr'tēbrāl) *a.* [L. *inter* between *vertebra*, vertebra.] Occurring between vertebrae *appl.* discs, fibrocartilages foramina, veins.
- Intervillous** (Int'ēr'vīl'ūs) *a.* [L. *inter* between *villi* hairs.] Occurring between villi *appl.* spaces in trophoblastic network filled with maternal blood.
- Interxylary** (Int'ēr'xīlār) *a.* [L. *inter* between; Gk. *xylon* wood.] Between xylem strands *appl.* phloem.
- Intersonal** (Int'ēr'sō'nāl) *a.* [L. *inter* between *sonus*, belt.] Between two zones *appl.* spindle fibres uniting groups of daughter chromosomes in anaphase of mitosis.
- Interoocelial** (Int'ēr'sō'siāl) *a.* [L. *inter* between *sonus*, animal *oche* house.] Occurring among oocelia.
- Intestinal** (Intē'stīnāl Intē'stī'nāl) *a.* [L. *intestinalis* internal.] Part intestines *appl.* glands, villi, etc.
- Intestin** (Intē'stīn) *a.* [L. *intestinalis* internal.] Part of alimentary canal from pylorus to anus, or part corresponding to this.
- Intextine** (Intēk'stīn) *a.* [L. *intus* within *exter* without.] An inner membrane of an extine.
- Intima** (Int'īmā) *n.* [L. *intimus* innermost.] The innermost lining membrane of part or organ; tunica intima.
- Intin** (Int'īn) *a.* [L. *intus* within.] The inner covering membrane of pollen grain, or of spore *Opp.* extine.
- Intrabiontic** (Int'rābīōn'tīk) *a.* [L. *intru* within; Gk. *bios* life *on* being] *Appl.* process of selection occurring in a living unit.
- Intrabulbar**—**Intragummal** *g.s.*
- Intracapsular** (Int'rākīp'sulār) *a.* [L. *intru* within; *capsula*, small chest.] Contained within capsule *appl.* protoplasm of Radiolaria *appl.* dendrites.
- Intracardiac** (Int'rākār'dīk) *a.* [L. *intru*, within Gk. *kardia*, heart.] Endocardiac, *g.s.*
- Intracartilaginous** (Int'rākār'tīlāj'īnūs) *a.* [L. *intru*, within; *cartilago* gristle.] Inside the cartilage *appl.* ossification endochondral.
- Intracellular** (Int'rā'sē'lulār) *a.* [L. *intru*, within; *cellula* little cell.] Within the cell.
- Intracortical** (Int'rākōr'tīkāl) *a.* [L. *intru*, within; *cortex* rind.] Within the cortex; uniting parts f brain cortex.
- Intra-epithelial** (Int'rā'ēpīthē'īāl) *a.* [L. *intru*, within Gk. *epi*, upon; *thelē* nipple.] Occurring in epithelium *appl.* glands, usually mucous.

- Intrafascicular** (in'trăfăsk'ulăr) *a.* [*L. intra* within *fasciculus* little bundle.] Within vascular bundle.
- Intrafoliaceous** (in'trăfollē'ashūs) *a.* [*L. intra* within *folium* leaf.] *Appl* stipules encircling stem and forming a sheath ochreate.
- Intrafusal** (in'trăfū'sāl) *a.* [*L. intra* within *fusus* spindle.] *Appl* fasciculi and fibres connected respectively with neurotendinous and neuromuscular spindles.
- Intraglossal** (in'trăglō'sāl) *a.* [*L. intra* within *glossus* bud.] Within a taste-bud *appl* nerve fibres, spaces.
- Intraglobular** (in'trăglōb'ulăr) *a.* [*L. intra* within *globulus* globule.] Occurring within a globule or cor puscle.
- Intrajugular** (in'trăjūg'ulăr) *a.* [*L. intra*, within *jugulum* throat.] *Appl* a process in middle of jugular notch of occipital bone.
- Intralamellar** (in'trăllāmē'lăr) *a.* [*L. intra*, within *lamella* thin plate.] Within a lamella *appl* trams of gill-bearing fungi.
- Intralobular** (in'trălob'ulăr) *a.* [*L. intra* within *lobulus* small lobe.] Occurring within lobules *appl* veins draining liver lobules.
- Intramembraneous** (in'trāmēm'brānē's) *a.* [*L. intra* within *membrana* skin.] *Appl* bone developed in membrane.
- Intramolecular** (in'trāmōlēk'ulăr) *a.* [*L. intra* within *F. molecule* small parcel.] *Appl* plant respiration from splitting up of complex substances within the cell.
- Intranuclear** (in'trānū'kleăr) *a.* [*L. intra* within *nucleus* kernel.] Within the nucleus *appl* spindles fibres, etc.
- Intraparietal** (in'trăpār'etāl) *a.* [*L. intra* within *paries* wall.] Enclosed within an organ within parietal lobe as salcus, etc.
- Intrapetalous** (in'trăpēt'alūs) *a.* [*L. intra* within *Gk. petalon* leaf.] Situated in a petaloid area, in echinoderm.
- Intrapetiolar** (in'trăpēt'iolăr) *a.* [*L. intra* within *petiolus* little foot.] Within the petiole base expansion.
- Intrapleural** (in'trăplē'ulăr) *a.* [*L. intra* within *Gk. pleura* side.] Within the thoracic cavity.
- Intrasegmental** (in'trăstēgmē'tāl) *a.* [*L. intra*, within *segmentum* part.] *Appl* vertebra formed of cranial and caudal elements of same original myotome of intermyotomic.
- Intrasectile** (in'trăstēk'ulăr) *a.* [*L. intra* within *selectio* choice.] Selection within an organ of cells fittest to survive.
- Intrasexual** (in'trăstēk'sulăr) *a.* [*L. intra* within *sexus* sex.] *Appl* selection of competing individuals of the same sex.
- Intraspecific** (in'trăspēs'ifik) *a.* [*L. intra* within *species* particular kind *facere* to make.] Within a species *appl* selection of individuals.
- Intraspicular** (in'trăspik'ulăr) *a.* [*L. intra*, within *spicula*, small spike.] Having spicules completely embedded in spongia.
- Intrastelar** (in'trăstē'lăr) *a.* [*L. intra*, within *stela* pillar.] Within the stela of a stem or root *appl* ground tissue, bundles, etc.
- Intratarsal** (in'trătrās'sāl) *a.* [*L. intra*, within *tarsus* ankle.] Within the tarsus *appl* joint of reptilian limb between rows of tarsal bones.
- Intrathyroid** (in'trăthī'roid) *a.* [*L. intra*, within *Gk. thyron* shield *oides* like.] *Appl* a cartilage joining laminae of thyroid cartilage during infancy.
- Intrauterine** (in'trăū'terīn) *a.* [*L. intra* within *uterus* womb.] Within the uterus.
- Intravaginal** (in'trăvā'gnāl) *a.* [*L. intra*, within *vagina* sheath.] Within vagina contained within sheath as grass branches.
- Intravascular** (in'trăvās'kulăr) *a.* [*L. intra* within *vasculum* small vessel.] Within blood-vessels.
- Intraventricular** (in'trăvēntrik'ulăr) *a.* [*L. intra* within *ventriculus* small cavity.] Within ventricle *appl* caudate nucleus of corpus

striatum seen within ventricle of brain.

intravesical (in trávě'skál) *n.* [L. *intrā* within; *vesica* bladder] Within the bladder

intraviteillin (in tráv'tel'ín) *n.* [L. *intrā*, with; *vitellus* egg-yolk.] Within the yolk of an egg

intraxylary (in tráf'jár) *n.* [L. *intrā*, within; Gk. *xylós* wood.] Within the wood or xylem.

intraleic (in trín'elk) *n.* [L. *intrā*-*secus* towards.] *Appl.* inner muscles, as of tongue of syrius etc. *appl.* brightness sensation due to differential retinal response to different wave-lengths. *Opp.* extraleic.

introties (in tró'trés) *n.* [L. *introtus* entry] An opening or orifice.

intr mittent (in tró'mít'tént) *n.* [L. *intrā* within; *mittere* to send.] Adapted for inserting *appl.* male copulatory organs.

introrse (in trór's) *n.* [L. *introrsus* within.] Turned inwards or towards axis of anthers, opening on side next petal.

introvers (in tróv'ért) *n.* [L. *intrō* within; *vertō* to turn.] That which is capable of involution, as anterior region of body of certain zooids, of certain annulatus, mouth extremity of certain mollusca. (in tróv'ért) *v.* To turn, bend, or draw inwards.

Intrusive growth,—*see* interpositional growth.

intussusception (in tús'séshp shín) *n.* [L. *intrā* within; *suscepere* to receive.] Growth in surface-extent or volume by intercalation of particles among those already present. *Opp.* accretion of apposition.

inulase (in'úlls) *n.* [L. *inula*, elecampane.] A plant enzyme which hydrolyses inulin into saccharose.

inulin (in'úlin) *n.* [L. *inula* elecampane] A carbohydrate occurring in rhizomes and roots of many plants, and forming saccharose when hydrolysed; dahlia starch ( $C_6H_{10}O_5$ ).

invaginate (in vág'inát) *v.* [L. *in*, into; *agere*, sheath.] To involute

or draw into a sheath; *appl.* in-sinking of wall of cavity vessel

*n.* Involted concave.

invagination (in vág'iná shún) *n.* [L. *in* into; *agere* sheath] Involution Involution gastrula formation by infolding of blastula wall Ingestion by temporarily transformed periplast-like ectoplasm in certain Protozoa.

inversion (in v'érs'hún) *n.* [L. *inversio*, to turn upside down.] Reversal in order of genes, or reversal of a chromosome segment, within the chromosome as a whole turning inward, inside out, upside-down of part.

invertase (in v'ért's) *n.* [L. *invertō* to turn into.] A plant enzyme which converts cane sugar into dextrose and saccharose invertin sucrose.

invertebrate (in v'ért'ébrát) *n.* [L. *in* not; *vertebra*, joint.] Back boneless without spinal column.

investing bones,—membrane bones.

investment (in v'est mént) *n.* [L. *in*, in; *vestire* to clothe.] Outer covering of part, organ animal, or plant.

involucel (in vól'el) *n.* [Dim. of L. *involucrum* covering] The small bracts at base of secondary umbel partial involucre.

invol cellate (in vól'el'ít) *n.* [Dim. of L. *involucrum* covering] Bearing involucre.

involucellum,—involucel.

invol cral (in vól'král) *n.* [L. *in* as; *volvare*, covering] *Part.* or like an involucre.

involucrate (in vól'krát) *n.* [L. *involucrum* covering] Bearing involucre.

invol cre (in vól'kér) *n.* [L. *involucrum* covering] Bracts forming whorl at base of condensed inflorescence, as of capitulum and umbel group of leaves surrounding antheridial and archegonial groups in bryophytes involucreum.

invol or t,—involucel, *g.*

involucrum (in vól'krúm) *n.* [L. *involucrum*, covering] 1 Hydro-medusae, protective cup into which

nematocysts can be spirally retracted rosettes of Orthoptera peritoneal layer formed around dead portion of hose in certain diseased conditions an involucre *q.v.*

Involuntary (in'vôl'untârî) *n.* [*L. in* not *voluntas* wish.] Not under control of will *appl.* plain unstriped muscles as of alimentary canal and to their movements.

Involute (in'vôlût) *n.* [*L. involutus* rolled up.] Of leaves, having the edges rolled inwards at each side of abaxils closely coiled.

Involution (in'vôlûshûn) *n.* [*L. involutus* rolled up.] Reduction to normal of enlarged modified, or deformed conditions shrinking of tissues in old age *appl.* forms that have become deformed to structure but not to such an extent as to be incapable of recovery a rolling upward as leaves movement of cells interior in certain type of gastrulation resting *appl.* spores, stage etc.

Iodophilic (iôdôfilik) *n.* [*Gk. iodes* violet like *philo* loving] Staining darkly in iodine solution *appl.* certain cytoplasmic inclusions and vacuoles iodophilous.

Iodopsin (iôdôpsîn) *n.* [*Gk. iodes* violet *opsin* sight.] Visual violet of retina cones a photo-sensitive protein-vitamin A compound.

Iodothyris (iôdôthîrîs) *n.* [*Gk. iodes* violet *thyris* shield.] An iodine compound in the colloid material of thyroid gland.

Iodothyris globulin (iôdôthîrîs'globûlin) *n.* [*Gk. iodes* violet *thyris* shield *L. globus* globe.] Compound of iodothyris and nucleoprotein extractable hormone of the thyroid gland.

Iridial angle — filtration angle of eye an angular recess between cornea and anterior surface of iris.

Iridocytes (ir'idôsitîs) *n. plu.* [*Gk. iris* rainbow *kytos* hollow] Granular granules bodies or plates, of which the reflecting tissue of skin of fishes is composed iridescent cells in integument of Sepia.

Iridomotor (ir'idômô'tôr) *n.* [*L. iris* rainbow *movens* to move.] Connected with movements of iris.

Iridophores.—iridocytes, *q.v.*  
Iris (ir'is) *n.* [*L. iris* rainbow] A thin circular contractile and vascular disc of eye between cornea and lens and surrounding the pupil.

Iris cells.—pigment cells surrounding cone and retinula of an ommatidium.

Irradiation (ir'râdîsh'ashûn) *n.* [*L. in* into *radius* ray] Treatment with rays, as ultra violet rays, X rays, etc. the spreading of an effect of a stimulus spreading of an excitatory process apparent enlargement of objects, due to difference in illumination.

Irritability (ir'râbîl'itî) *n.* [*L. irritor* to provoke.] Power of receiving external impressions, and reacting to them, inherent in living matter.

Irritant (ir'rîânt) *n.* [*L. irritare* to provoke.] An external stimulus which provokes a response.

Irrorate (ir'ôrîk) *n.* [*L. brumens* to bedew] Covered as if by minute droplets dotted with minute colour markings as wings of certain butterflies.

Isadelphous (isâdêl'fûs) *n.* [*Gk. isos* equal *adelphos* brother] With equal number of stamens in two phalanges.

Isauxesis (isôksê'sis) *n.* [*Gk. isos* equal *auxesis* growth] Growth of a part at the same rate as that of the whole ontogenetic heterauxesis.

Ischiadic (is'kiâd'ik) ischial (is'kiâl) *n.* [*Gk. ischion* hip.] Part or in region of hip *appl.* artery vein, process of ischiopubic plate.

Ischiocapsular (is'kiôkâp'sûlâr) *n.* [*Gk. ischion* hip *L. capsula* little chest.] *Appl.* a ligament joining capsular ligament and hip.

Ischiocavernosus (is'kiôkâv'êrôd'sis) *n.* [*Gk. ischion* hip *L. cava* hollow] *Appl.* muscle between hip and corpora cavernosa erector of penis, or of clitoris.

- ischiofem orius** (is'kiōōfēs'riō-) *n.* [Gk. *ischion* hip L. *femur* bent.] Posterior thigh muscle in salamander corresponding to semi-membranosus.
- ischiopodite** (is'kiōpōdīt) *n.* [Gk. *ischion* hip *podis* foot.] Proximal joint of walking legs of certain Crustacea, or of maxillipoda.
- ischiopubic** (is'kiōpō'bik) *a.* [Gk. *ischion* hip L. *pubis* adult.] *Appl.* gap or fenestra between ischium and pubis *appl.* a median cartilaginous plate with median and lateral processes, in Dipnoi.
- ischiopubis** (is'kiōpō'bīs) *n.* [Gk. *ischion*, hip L. *pubis* adult.] The ischium of pterodactyle pubis being excluded from acetabulum; fused ischium and pubis.
- ischior ctal** (is'kiōrēk'tāl) *a.* [Gk. *ischion*, hip L. *rectus* straight.] *Part.* ischium and rectum *appl.* fossa and muscles.
- ischium** (is'kiōm) *n.* [Gk. *ischion*, hip.] The ventral and posterior bone of each half of pelvic girdle of vertebrates except fishes an ischiopodite.
- isidia** (is'idīā) *n. pl.* [Gk. *isis* plant *latens*, *dim.*] Coral-like soredia on surface of some lichens. *Stag* isidium.
- isidiferous** (is'idī'fēris) *a.* [Gk. *isis* plant; L. *ferre* to bear.] Bearing isidia isidophorous.
- isidioid** (is'idī'oid) *a.* [Gk. *isis* plant *latens* *dim.* *oides* like.] Like an isidium.
- isidium**, —*ing* of isidia.
- Island of Reil** [*J. C. Reil* German anatomist]. *Isula*, *g.v.*
- Islets of Langerhans** [*P. Langer* Aust. German anatomist]. Spherical or oval bodies scattered throughout the pancreas, concerned in metabolism of sugar in body endocrine portion of pancreas.
- isogglutin** (is'ōglōōt'īn) *n.* [Gk. *isos* equal L. *agglutinare* to glue to.] Fertilin or agglutin of eggs which reacts on sperm of same species of heteroagglutin.
- isogglutinogen** (is'ōglōōt'īn'jōn)

- isohaemagglutinogen** (is'ōhēm āglōōt'īn'jōn) *n.* [Gk. *isos* equal *haema*, blood; *genesis* birth L. *agglutinare* to glue to.] Substance producing agglutination of erythrocytes within the same blood group.
- isobilateral** (is'ōbilāt'ērāl) *a.* [Gk. *isos* equal L. *bis* twice *latus* side.] *Appl.* form of bilateral symmetry where a structure is divisible in two planes at right angles.
- isobryonic** (is'ōbrīōn'ik) *a.* [Gk. *isos* equal *bryos*, to proliferate.] Developing equally as lobes of dicotyledonous embryo; isobryous.
- isocarpous** (is'ōkār'pōs) *a.* [Gk. *isos* equal *karpos* fruit.] Having carpels and perianth divisions equal in number.
- isocercal** (is'ōkēr'tāl) *a.* [Gk. *isos* equal; *keras* tail.] With vertebral column ending in median line of caudal fin.
- isochela** (is'ōkē'shā) *n.* [Gk. *isos* equal *chele* claw.] A chela with two parts equally developed two-pronged anchor-shaped picule in certain sponges.
- isochromosome** (is'ōkrō'mōsōm) *n.* [Gk. *isos* equal *chroma*, colour *soma*, body.] Chromosome with identical arms united in median centromere metacentric derived from telocentric chromosomes.
- isochromous** (is'ōkrō'mōs) *a.* [Gk. *isos* equal *chroma*, colour.] Equally tinted uniformly coloured isochromatic, isochrouous.
- isocortex** (is'ōkōr'tēks) *n.* [Gk. *isos* equal L. *cortex* bark.] The part of cerebral cortex made up of six layers of nerve-cells. *Opp.* allocortex.
- isocyt** (is'ōkīt'ik) *a.* [Gk. *isos* equal *kytos* hollow.] With all cells equal.
- isodactylous** (is'ōdāk'tīlīs) *a.* [Gk. *isos* equal *daktylos* finger.] Having all digits of equal size.
- isodemie** (is'ōdēm'ik) [Gk. *isos* equal *demos* people.] With or *part* populations composed of an equal number of individuals *appl.* lines on map which pass through points representing equal population density.

- isodiametric** (T'sōdīāmēt rīk) *a.* [Gk. *isos* equal *diē* through *metron* measure.] Having equal diameters *appl.* cells or other structures *appl.* rounded or polyhedral cells.
- isodont** (T'sōdōnt) *a.* [Gk. *isos* equal *odon* tooth.] Having teeth all equal.
- isodynamic** (T'sōdīnām'ik) *a.* [Gk. *isos* equal *dynamis* power.] Of equal strength providing the same amount of energy *appl.* foods.
- isogamete** (T'sōgāmēt) *n.* [Gk. *isos* equal *gametes* spouse.] One of a pair of undifferentiated gametes.
- isogamous** (T'sōg'āmūs) *a.* [Gk. *isos* equal *gamos* marriage.] Having the gametes alike.
- isogamy** (T'sōg'ām) *n.* [Gk. *isos* equal *gamos* marriage.] Union of similar gametes, or of similar unicells.
- isogenes** (T'sōjēnz) *n. plu.* [Gk. *isos* equal *genes* descent.] Lines on a map which connect points where same gene frequency is found.
- isogenetic** (T'sōjēnēt'ik) *a.* [Gk. *isos* equal *genesis* descent.] Arising from the same or a similar origin; of the same genotype *isogenotes*.
- isogenic** (T'sōjēnīk) *a.* [Gk. *isos* equal *genes* race.] Homozygous.
- isogenomic** (T'sōjēnōmīk) *a.* [Gk. *isos* equal *gamos* race.] Containing similar sets of chromosomes *appl.* *cleri* *isogenomic*.
- isognathus** (T'sōg nāthūs) *a.* [Gk. *isos* equal *gnathos* jaw.] Having both jaws alike.
- isolate** (T'sōlār) *n.* [It. *isola*, from L. *insula* island.] A breeding group restricted by isolation.
- isolateral** (T'sōlat erāl) *a.* [Gk. *isos* equal L. *latus* side.] Having equal sides *appl.* leaves with palmate thence on both sides.
- isolation** (T'sōlā shōn) *n.* [L. *insula* island.] Separation from others prevention of mating between breeding groups owing to partial topographical, ecological phenological physiological genetic, or other barriers.
- isolecithal** (T'sōlēts'khāl) *a.* [Gk. *isos* equal *lethikos* yolk.] *Appl.* ova with yolk granules distributed nearly equally throughout egg substance.
- isomer**—**isophane** *g.*
- isomastigote** (T'sōmās'tīgōt) *a.* [Gk. *isos* equal *mastix* whip.] Having flagella of equal length.
- isomere** (T'sōmēr) *n.* [Gk. *isos* equal *meros* part.] A homologous structure or part.
- isomeric** (T'sōmēr'ik) *a.* [Gk. *isos* equal *meros* part.] Having equal numbers of different parts *appl.* flowers with same number of parts in each whorl exhibiting homometry.
- isometry** (T'sōm'etrī) *n.* [Gk. *isos* equal *metron* measure.] Growth of a part at the same rate as the standard or the whole.
- isomorphic** (T'sōmōr'ik) *a.* [Gk. *isos* equal *morphe* shape.] Superficially alike *isomorphous* *appl.* alternation of diploid and haploid phases in morphologically similar generations.
- isomorphism** (T'sōmōr'izm) *n.* [Gk. *isos* equal *morphe* shape.] Apparent similarity of individuals of different race or species.
- isomyaric** (T'sōmīār'ik) *a.* [Gk. *isos* equal *myos* muscle.] With adductor muscles equal in size *isomyarian*.
- isopedin** (T'sōp ēdīn) *n.* [Gk. *isopodas* level.] Inner layer of laminated bony material in coeloid and ganoid fish scales.
- isopetalous** (T'sōpēt'ālūs) *a.* [Gk. *isos* equal *petalon* petal.] Having similar petals.
- isophane** (T'sōfān) *n.* [Gk. *isos* equal *phaneros* to show.] A line connecting all places within a region at which a biological phenomenon *g.* flowering of a plant, occurs at the same time *isomeric* *phenocountour*.
- isophene** (T'sōfēn) *n.* [Gk. *isos* equal *phaneros* to show.] A contour line delimiting area corresponding to given frequency of a variant form *phenocountour*.

isophenous (ˈɪsəˈfɛnʊs) *n.* [Gk. *isos* equal *phainomai* to show] Being of the same phenotype

isophytoid (ˈɪsəˈfɪtɔɪd) *n.* [Gk. *isos* equal; *phyton* plant *eidos* form.] An individual of a compound plant not differentiated from the rest.

isoplankt (ˈɪsəˈplɒŋkt) *n.* [Gk. *iso* equal *planktos* wandering] Line representing, on a map, distribution of equal amounts of plankton, or of particular plankton species.

isoploid (ˈɪsəˈplɔɪd) *n.* [Gk. *isos* equal *pleos* overfold] With an even number of chromosome sets in somatic cells. *n.* An isoploid individual.

isopodous (ˈɪsəˈpɒdʊs) *n.* [Gk. *isos* equal *podos* foot.] Having the legs alike and equal.

isopogonous (ˈɪsəˈpɒɡənʊs) *n.* [Gk. *isos* equal *pogon* beard.] Of feathers having the two webs equal and similar.

isopolyploid (ˈɪsəˈpɒlɪˈplɔɪd) *n.* *n.* [Gk. *isos* equal *poly* many *pleos* overfold *eidos* form.] Polyploid with an even number of chromosome sets as tetraploid, hexaploid, octoploid, etc.

isopygous (ˈɪsəˈpɪɡənʊs) *n.* [Gk. *isos* equal *pygion* rump.] With pygidium and cephalon of equal size *adj.* trilobites.

isospore (ˈɪsəˈspɔːr) *n.* [Gk. *isos* equal *spora* seed] An agamete produced by schizogony *adj.* anisospore.

isoporous (ˈɪsəˈpɔːrəs ˈɪsəˈpɔːrɪs) *n.* [Gk. *isos* equal *poros* seed] Having spores of one kind only homoporous.

isostemonous (ˈɪsəˈstɛmənʊs) *n.* [Gk. *isos* equal *L. stemon* warp] Having stamens equal in number to that of sepals or of petals.

isotelle (ˈɪsəˈtɛl) *n.* [Gk. *isos* equal *telos* end.] Exhibiting or tending to produce the same effect homoplastic *adj.* food factors that can replace each other *part* motely

isotal (ˈɪˈtɒl) *n.* *plu.* [Gk. *isos*

equal *tele* end.] Substances having the same physiological, *f* nutritional, effect.

isotely,—homoplasty *f.*

isotomy (ˈɪsəˈtɒmi) *n.* [Gk. *isos* equal; *temno* to cut.] Bifurcation repeated in a regular manner as in crinoid brachia.

isotoni (ˈɪsəˈtɒni) *n.* [Gk. *isos* equal *tonos* strain.] Of equal tension having equal osmotic pressure.

isotonicity (ˈɪsəˈtɒnɪsɪˈti) *n.* [Gk. *isos* equal *tonos* tone.] Normal tension under pressure or stimulus.

isotopic (ˈɪsəˈtɒpɪk) *n.* [Gk. *isos* equal *topos* place.] Pert isotopes chemical elements having the same atomic number and identical chemical properties, but differing in atomic weight.

isotropic (ˈɪsəˈtɒpɪk) *n.* [Gk. *isos* equal *trephos* turning] Singly refracting in polarized light, *adj.* the light stripes of voluntary muscle fibres *adj.* anisotropic symmetrical around longitudinal axis not influenced in any one direction more than another *adj.* growth rate without pre-determined axes, as eggs isotropous.

isotropy (ˈɪsəˈtɒpi) *n.* [Gk. *isos* equal *trephos* to turn.] Absence of predetermined axes in eggs.

isotype (ˈɪsəˈtɪp) *n.* [Gk. *isos* equal *typos* pattern.] A specimen collected from the same plant as the holotype and at the same time.

isozoi (ˈɪsəˈzɔɪ) *n.* [Gk. *isos* equal *zoe* animal.] Inhabited by similar forms of animal life.

isozoid (ˈɪsəˈzɔɪd) *n.* [Gk. *isos* equal *zoe* animal *eidos* like] A zoid similar to parent stock.

isthmiate (ˈɪsthɪˈmeɪt) *n.* [Gk. *isthmos* neck.] Connected by an isthmus-like part.

isthmus (ˈɪsthməs) *n.* [Gk. *isthmos* neck.] A narrow structure connecting two larger parts as those of aorta, acoustic meatus limbic lobe, prostate thyroid, etc. or between semi-cells junction between perikaryon and axon-base.



- iter (n'ér) *n* [L. *iter* way] A passage or canal as those of middle ear brain etc. an aqueduct.  
 Ivory (iv'ér) *n* [L. *ebur* ivory through F *ivoire*] Dentine of teeth usually that of elephants tusks and similar structures formed from odontoblasts.

## J

- Jacobson's cartilage [L. L. *Jacobson* Danish anatomist] Vomeroseal cartilage supporting Jacobson's organ.  
 Jacobson *n* rve — tympanic branch of the glossopharyngeal nerve.  
 Jacobson's organ,—a diverticulum of olfactory organ in many vertebrates, often developing into an epithelium-lined sac opening into mouth vomeroseal organ.  
 Jettitation (jék'titsh'ón) *n*. [L. *jacere* to toss.] Process of scattering seeds by euser mechanism, *q.v.*  
 Jculator (jék'úllitsh) *n* [L. *jaculator* shooter] A placental process, usually hooked, of certain fruits.  
 Jaculatory (jék'úllitsh'ér) *a*. [L. *jaculatorius* throwing] Daring out capable of being emitted.  
 Jculator duct,—portion of vas deferens which is capable of being protruded in many animals.  
 Jaculiferous (jék'úllif'érús) *a*. [L. *jaculum* dart *ferre* to carry] Bearing dart-like spines.  
 Jarovization (yár'ovish'ash'ón) *n*. [Russ. *yarovizatsiya*, from *yarven* vernal.] Vernalization, *q.v.*  
 Jaw (jó) *n*. [Akin to *show* *how*] A structure of vertebrates, supported by bone or cartilage naked or sheathed in horn or bearing teeth or horny plates, forming part of mouth and helping to open or shut it a similarly placed structure in invertebrates.  
 Jaw foot,—maxillipeds of Arthropoda.  
 J-disc,—isotropic or I-disc *q.v.*  
 Jecorin (jék'órín) *n* [L. *jecor* liver] A lecithin-like substance or phosphatide present in liver and other organs of the body.  
 Jejunum (jé'jún'úm) *n* [L. *jejunus* empty] Part of small intestine between duodenum and ileum.  
 Jelly of Wharton (T' Wharton, English anatomist). The gelatinous connective tissue surrounding the vessels of umbilical cord.  
 Johnston's organ [C. Johnston, British entomologist]. A statocyst or chordotonal organ in second segment of insect antenna.  
 Joint (jóint) *n*. [O.F. *joindre* from L. *joungere* to join] Place of union or separation of two parts, as between bones articulation a node portion between two nodes or joints.  
 Jordan's organ [K. Jordan zoologist]. The chaetosemata.  
 Juba (jób'a) *n*. [L. *juba*, mane.] A mane loose pample.  
 Jubate (jób'áti) *a*. [L. *jubatus* maned.] With mane-like growth.  
 Jugal (jóog'ál) *n*. [L. *jugum* yoke.] The malar bone between maxilla and squamosal *a. Peri* jugum.  
 Jugat (jóog'át) *a*. [L. *jugum* yoke.] Having pairs of leaflets furnished with a jugum.  
 Jugular (jóog'úllár' jóog'úllár) *a*. [L. *jugulum* collar-bone.] *Peri* neck or throat *appl.* veins, foramen, fossa etc. *appl.* nerve, the hyoiden or posterior post trematic nerve *appl.* ventral fish-fins beneath and in front of pectoral fins.  
 Jugul m (jóog'úllím) *n* [L. *jugulum* collar-bone.] The foreneck region of bird breast in insects, the jugum of wing.  
 Jugum (jóog'úm) *n*. [L. *jugum* yoke.] A pair of opposite leaflets ridge on mericarp of umbelliferous plants small lobe on posterior border of fore-wing of certain moths ridge — con-  
 two *ap* — union of first  
 birth

**Jurassi** (joo'ri'sh) *n.* [*Jura* mountain.] *Part.* or *appl.* Mesozoic period between Triassic and Cretaceous.

**Juvenal** (joo'ven'ahl) *n.* [*L. juvenalis* youthful.] Youthful *appl.* plumage replacing nestling-down of first plumage.

**Juvenil** hormo *n.*—secreted by corpus allatum and inhibiting development of adult characters, in certain insects.

**Juxta** (jūk'stā) *n.* [*L. juxta*, close to.] A ring-walled structure supporting sheath of oviducts.

**Juxtaglomerular** (jūk'stāglōmēr'ulār) *n.* [*L. juxta*, close to *glomerulus* to form into a ball.] *Appl.* cells surrounding arteriole of glomerulus of kidney.

**Juxtanuclear** (jūk'stānū'klār) *n.* [*L. juxta*, close to *nucleus* kernel.] *Appl.* bodies basophil deposits in cytoplasm of vitamin D-deficient parathyroid cells.

## K

**kaino**—*see* *caino*.

**kako**—*see* *cako*.

**kallidium** (kāl'id'īdum) *n.* [*Dim.* f *Gk. kallos*, but] A form of sporocarp, or cystocarp.

**kalyptoma** (kāl'it'mā) *n.* [*Gk. kalyptoma*, covering] Vacuolated part of outer layer of certain radiolarians.

**kalyptocyte** (kāl'it'māts) *n.* *plu.* [*Gk. kalyptoma*, covering *kytos* cell.] I ascidians, certain follicle-cells which migrate into the egg after maturation.

**karyaster** (kār'īk'stēr) *n.* [*Gk. karyon*, nut, nucleus *aster* star] A star-shaped group of chromosomes.

**karyenchyma** (kār'ēng'kīmā) *n.* [*Gk. karyon* nucleus *enchyma* infusion.] Nuclear sap achromatin; karyochylema.

**karyogamy** (kār'ēng'gām) *n.* [*Gk. karyon* nucleus *gamos* marriage.] Union and interchange of nuclear material.

**karyokinesis** (kār'ēk'nē'sis) *n.* [*Gk. karyon* nucleus *kinesis* movement.] Indirect cell-division mitosis.

**karyology** (kār'ēō'logē) *n.* [*Gk. karyon*, nucleus *logos* discourse.] Nuclear cytology.

**karyolymph** (kār'ēō'līm) *n.* [*Gk. karyon* nucleus *L. lymphē*, water] Nuclear sap karyenchyma.

**karyolysis** (kār'ēō'lis) *n.* [*Gk. karyon* nucleus *lysis*, to loosen.] Supposed dissolution of the nucleus in mitosis liquefaction of nuclear membrane.

**karyomer** (kār'ēōmēr) *n.* [*Gk. karyon* nucleus *meros* part.] In mitosis, a small vesicle into which a chromosome is converted in one type of nuclear construction karyomeres.

**karyomicrosome** (kār'ēōmī'krōsōm) *n.* [*Gk. karyon* nucleus; *micros* small *soma*, body] A nuclear granule.

**karyomite** (kār'ēōmīt) *n.* [*Gk. karyon* nucleus *mitos* thread.] A chromosome.

**karyomit me** (kār'ēōmīt'mē) *n.* [*Gk. karyon*, nucleus *mitome*, network.] The nuclear thread-work.

**karyomitosis** (kār'ēōmīt'ō'sis) *n.* [*Gk. karyon* nucleus *mitos* thread.] Indirect nuclear division, mitosis.

**karyon** (kār'ēō) *n.* [*Gk. karyon*, nucleus.] The cell-nucleus.

**karyophane** (kār'ēōfān) *n.* *plu.* [*Gk. karyon* nucleus *phaino*, to appear] Microsomes or nucleus-like granules surrounded by an ovoid matrix, which form the spiranome and axoneme in stalk of Infusoria.

**karyophore** (kār'ēōfēr) *n.* [*Gk. karyon*, nucleus; *phero*, to bear] System of ectoplasmic fibrils or membranes for mooring the nucleus, in certain ciliates.

**karyoplasm** (kār'ēōpīlām) *n.* [*Gk. karyon* nucleus *plasma* mould.] Nucleoplasm, the nuclear substance of cytoplasm.

**karyorrhexis** (kār'ēōrēk'sis) *n.* [*Gk. karyon* nucleus *hexis* breaking] Fragmentation of the nucleus.

**karyosome** (kār'lobəm) *n.* [Gk. *karyon* nucleus *soma* body.] A nucleolus of the net knot type a chromosome a special aggregation of chromatin in resting nucleus the cell-nucleus itself of plasmosome.

**karyosphere** (kār'lobəf) *n.* [Gk. *karyon* nucleus *sphaira* globe.] The large nucleolus from which arise all or most of the chromosomes of Protista.

**karyota** (kār'lob'tā) *n. pl.* [Gk. *karyon* nucleus.] Nucleated cells.

**karyotheca** (kār'lobhē'kā) *n.* [Gk. *karyon* nucleus *thekē* covering.] The nuclear membrane.

**karyotia** (kār'lob'ia) *n.* [Gk. *karyon* nucleus.] Chromatin nuclear substance.

**kary type** (kār'lob'tip) *n.* [Gk. *karyon* nucleus *typos* pattern.] Group of individuals with the same chromosome number and similar linear arrangement of genes in homologous chromosomes chromosome complement of such group

**kata-** —also cat

**katabolism** (kātāb'olizm) *n.* [Gk. *kata*, down *bale* throw.] The destructive chemical processes in living organisms, *opp.* anabolism.

**katabolite** (kātāb'olīt) *n.* [Gk. *kata*, down *bale* throw.] Any product of katabolism, *e.g.* res.

**katage** *osis* (kāt'āyēn'ōsis) *n.* [Gk. *kata*, down *genesis* descent.] Retrogressive evolution.

**katakineti** (kāt'āktinē'tik) *a.* [Gk. *kata* down *kinesis* to move.] *App.* process leading to discharge of energy of anapnetic.

**katakinetomers** (kāt'āktinēt' mērs) *n. pl.* [Gk. *kata*, down *kinesis* to move *meros* part.] Unreactive stable atoms or molecules.

**kataphase** (kāt'āfāz) *n.* [Gk. *kata* down *phaino* appearance.] The stages of mitosis from formation of chromosomes: division of cell of anaphase.

**kataphoresis** (kāt'āfōrē'sis) *n.* [Gk. *kata*, down *pherein* to carry.] Transfer of fluids through mem-

brane from anode to cathode electrical osmosis.

**kataphoric** (kāt'āfōr'ik) *a.* [Gk. *kata*, down *pherein* to carry.] *App.* passive action the result of lethargy.

**cataplexy** (kāt'āplēksī) *n.* [Gk. *kata* down *plasma* to strike.] Condition of an animal feigning death maintenance of postural reflex induced by restraint or shock cataplexis of catalepsia.

**katastasis** (kāt'āstāt, kāt'āstī) *n.* [Gk. *kata*, down *stasis* state.] Any product of katabolic activity of protoplasm katabolite.

**katatrepsis** (kāt'ātrēp'sis) *n.* [Gk. *kata* down *trepein* to turn.] Stage of decreasing movement in blastokinesis.

**katharotic** (kāt'hārō'tik) *a.* [Gk. *katharos* pure *bios* life.] Living in clean waters *app.* Protista *app.* saprobic.

**kathodic** (kāt'hōd'ik) *a.* [Gk. *kathos* descent.] Not arising in conformity with genetic spiral *app.* leaves.

**kation** (kāt'ion, kāt'ō) *n.* [Gk. *kata* down *ion* to go.] A positively charged ion which moves towards cathode or negative pole *app.* anion.

**Keber's organ** [G. A. F. Keber German zoologist.] Pericardial glands in lamellibranchs.

**keel** (kēl) *n.* [A.S. *ceol* ship.] The carina or breast bone of flying birds boat-shaped structure formed by two anterior petals of Leguminosae ridge on blade or on other parts of grasses.

**kenenchyma** (kēnēng'kimā) *n.* [Gk. *kemos* empty *enchyma* infusion.] A tissue devoid of its living contents, as cork.

**keph** —see ceph

**keraphyllous** (kērāf'ill'ūs) *a.* [Gk. *keros* horn *phyllon* leaf.] *App.* layer of a hoof between horny and sensitive parts.

**keratin** (kēr'atin) *n.* [Gk. *keros* horn.] A scleroprotein forming the basis of epidermal structures such as horns, nails, hairs.

keratinisation (kér'átinísh' shūn) *n.* [Gk. *keras* horn.] State of becoming horny; *appt.* cells of epiderm developing in a horny material.

keratogen us (kér'átōj' énfus) *a.* [Gk. *keras* horn *-genes* producing.] Horn producing.

keratohyalin (kér'átōh'álin) *n.* [Gk. *keras* horn; *hyalus* glass.] Substance contained in stratum lucidum of skin.

keratoid (kér'átōid) *a.* [Gk. *keras* horn *eidos* form.] Horny resembling horn.

keratose (kér'átōs) *a.* [Gk. *keras* horn.] Having horny fibres in skeleton, as certain sponges.

kernel (kér' ēl) *n.* [A.S. *cyrnel*, small grain.] The inner part of seed containing the embryo.

ketogenic hormone,—a preputillary principle which influences fat metabolism.

key-fruit,—winged sphenes hanging in clusters, as of *Acer* and *Fraxinus*.

key gene,—oligogene, *q.s.*

kidney (kíd'nē) *n.* [A.S. *cwēth* womb *new* kidney.] Nephros paired organ which elaborates and excretes urine.

kinaesthesia (kín'ēsthē'sis) *n.* [Gk. *kinein* to move *aisthēsis* perception.] Perception of movement due to stimulation of muscles tendons, and joints proprioception.

kinaesthetic (kín'ēsthē'tik) *a.* [Gk. *kinein* to move; *aisthēsis* perception.] Part sense of movement or muscular effort *appt.* sense, arm.

kinase (kín'as) *n.* [Gk. *kinein*, to move.] A substance which transforms symogens to enzymes.

kinesiodic (kín'ēsiōd'ik) [Gk. *kinesis* movement *hodos* way.] Part motor nerve paths of kinesiodic.

kinesis (kín'ēsis) *n.* [Gk. *kinesis* movement.] Random movement locomotor reactions depending on intensity of stimulus; variation in linear or angular velocity.

kinesthetic (kín'ēsthē'tik) *a.* [Gk. *kinesis* movement *hodos* way.] Conveying motor impulses.

kinetic (kín'ētik) *a.* [Gk. *kinein*, to

move.] Active *appt.* function of movement, *appt.* static energy employed in producing or changing motion, *appt.* division centre | cell-division.

kinetoblast (kín'ētiblast) *n.* [Gk. *kinein* to move *blastos* bud.] Outer ciliated investment of aquatic larvae with special locomotor properties.

kinetochore (kín'ētikōr) *n.* [Gk. *kinein* to move *chore* place.] Spindle-attachment or insertion region centromere.

kinetogenesis (kín'ētijēn'ēsis) *n.* [Gk. *kinein* to move *genesis* descent.] The evolution theory that animal structures have been produced by animal movements.

kinetomeres (kín'ētōmērs) *n. plu.* [Gk. *kinein*, to move *meros* part.] Molecules or atoms reactive or stable, ana- and kata-kinetomeres.

kinetosome (kín'ētōsōm) *n.* [Gk. *kinein*, to move *L. nucleus* kernel.] The secondary nucleus, kinetoplast, or parabasal body in forms such as trypanosomes in close connection with flagellum and undulating membrane of trypomastix.

kinetoplasma (kín'ētōplāsm) *n.* [Gk. *kinein*, to move *plasma* something formed.] An iron-containing nucleo-protein forming source of energy to Nissl granules.

kinetoplast (kín'ētōplast) *n.* [Gk. *kinein* to move *plastis* formed.] Composite body formed by union of parabasal body with blepharoplast in some Mastigophora.

kinetosome (kín'ētōsōm) *n.* [Gk. *kinein*, to move *soma* body.] One of group of granules occupying the polar plate region in moss sporogonidia.

kinoplasma (kín'ōplāsm) *n.* [Gk. *kinein* to move *plasma*, mould.] The substance of attraction-sphere, astral rays, and spindle fibres archiplasm ergastoplasm.

kinoplasmosomes (kín'ōplāsmōsōms) *plu.* [Gk. *kinein* to move *plasma* form *soma*, body.] Phragmoplast fibres seen at periphery of cell plate.

klado-—clado- *g.s.*

klasma plates (kláz má pláts) *n. pl.* [Gk. *klasma* fragment L. *platus* flat.] Small parts of compound ambulacral plates separated by growth pressure, in echinoids.

klisto-—also clasto- *g.s.*

klistogamous (klístog'ámús) *n.* [Gk. *klistos* closed *gamos* marriage.] Fertilised in closed flowers.

kleron nous (klérón'óús) *n.* [Gk. *kleronemos* heir.] Inherited *appt* paths in nervous system.

klinokinesis (klín'ókínés'is) *n.* [Gk. *klinos* to slope *kinesis* movement.] Change in rate & change of direction or angular velocity due to intensity of stimulation of kinesis.

kl n.—clone *g.s.*

knee (né) *n.* [A.S. *cnaw* knee.] Genu joint between femur and tibia root process of certain swamp-dwelling trees.

knaphoplankton (né'fpláŋk'tón) *n.* [Gk. *knaphos* twilight *planktos* wandering.] Plankton living at depths between thirty and five hundred metres of phaeoplankton skotoplankton

knot (nót) *n.* [A.S. *cnotta*, knot.] 1 wood base of branch surrounded by new layers of wood and hardened by pressure in nuclear meshwork, small particles of chromatin where meshes cross.

Kölliker's canal [R. A. von Kölliker Swiss zoologist.] A canal leading from otocyst towards external as in certain Cephalopoda.

kolyon (kól'ón) *n.* [Gk. *kalyon* hinder.] Substance elaborated in and conveyed from tissue or organ which lessens or inhibits function of other tissues

koinma (kóm'má) *n.* [Gk. *koinma* clause.] Sarcomere incoinnma.

koniocortex (kón'iókór'teks) *n.* [Gk. *kónis* dust L. *cortex* bark.] Granular part of cortex characteristic of sensory areas of brain.

Krause's end bulbs, — see end bulbs.

Krause's membrane [B. J. F. Krause German anatomist.] The

single or double row of dots in the light transverse band of striated muscle telophragma Z-disc.

Kupffer cells [A. B. von Kupffer German anatomist.] Stellate macrophages of liver sinuses.

kyog nie (kíjén'ik) *n.* [Gk. *kytos* pregnancy *genes* descent.] *Appt* preputiary hormone stimulating secretion of progesterin by corpus lutea.

kyto-—cyto- *g.s.*

## L

labella (lábel'a) *n.* [L. *labellum* small lip.] Paraglossa of insects *plu* of labellum.

labellate (lábel'at) *n.* [L. *labellum* small lip.] Furnished with labella or small lips.

labelloid (lábel'oid) *n.* [L. *labellum* small lip Gk. *oides* form.] Like labellum.

labellum (lábel'um) *n.* [L. *labellum* small lip.] The lower petal morphologically posterior of an orchid two fused lateral staminodes as in flower of Zingiberaceae small lobe beneath labrum or labial palp, in insects proboscis lobe.

labia (lá'biá) *n. plu* [L. *labium* lip.] Lips lip-like structures.

labia t. bel.—margina of cerebral hemispheres overlapping corpus callosum.

labia majora,—outer lips of vulva.

labia minora,—inner lips of vulva.

labial (lá'biál) *n.* [L. *labium* lip.] Part or resembling a lip

labial palp—lobe-like structure near mouth of molluscs jointed appendage on labrum of insects.

labiate (lá'biát) *n.* [L. *labium* lip.] Lip-like possessing lips thickened margins having limb of calyx or corolla so divided that one portion overlaps the other

labiatiflorous (lá'biátifló'rus) *n.* [L. *labium* lip *flor* flower.] Having the corolla divided into two lip-like portions.

- labidophorous (lăb'īdōf'ōrəs) *n.* [Gk. *labis* forceps *pherein* to carry] Possessing pincer-like organs
- labialia (lă'bē'li) *n.* [L. *labium* lip.] A mouth-part of Myriopoda.
- labile (lă'bīl lăb'īl) *n.* [L. *labilis* pt to slip.] Readily undergoing change *unstabl* *appl.* genes that are constantly mutating
- labiodental (lă'bīdēn'tāl) *n.* [L. *labium* lip *dens* tooth.] *Peri.* lip and teeth *appl.* an embryonic lamina *appl.* labial surface of tooth.
- labiosternite (lă'bīstēr'nī) *n.* [L. *labium* lip *sternon* breast-bone] A median area between palpi of insect head.
- labiostipes (lă'bīstēp's) *n.* [L. *labium* lip *stipes* stalk.] A portion of basal part of insect labrum.
- labipalp (lă'bīpālp) *n.* [L. *labium* lip, *palpare* to feel.] Labipalpus labial palp of insects.
- labium (lă'bīəm) *n.* [L. *labium* lip.] A lip, or lip-shaped structure the fused second maxillae of insects. *Plu* labia.
- labral (lă'bri) *n.* [L. *labrum* lip.] *Peri.* labrum.
- labrocyte (lăbrōt) *n.* [Gk. *labros* greedy *kytos* hollow] A mast cell.
- labrum (lă'briəm) *n.* [L. *labrum* lip.] Anterior lip of certain arthropods hypostoma of trilobites outer margin of mouth of gastropod shell ring of fibrocartilage, arthropod, *q.v.*
- labyrinth (lăb'irīnθ) *n.* [L. *labyrinthos* labyrinth.] The complex internal ear box or membranous lateral mass of air-cells of ethmoidal bone portions of kidney cortex with uriniferous tubules tracheal tympanum.
- labyrinthodont (lăb'irīnθodōnt) *n.* [Gk. *labyrinthos* labyrinth *odous* tooth.] Having teeth with great complexity of dentine arrangement.
- la (lă) *n.* [Persian, *laq*, lacquer] A resinous secretion of lac glands of certain Coccidae composition depending on the food plant.

- laccate (lăk't) *n.* [It. *lacca* arnish.] Appearing as if varnished.
- lacerat d (lăk'serēt) *n.* [L. *lacerare* to tear] Having margin or apex deeply cut into irregular lobes.
- laceriform (lăk'ser'ifōrm) *n.* [L. *lacerare*, lacerat; *forma* shape.] Having the shape of lizard.
- lacetar (lăk'ser'tis) *n.* [L. *lacetar* arm-muscle.] *Lacetar* fibrous, aponeurosis of tendon of biceps muscle of the arm bicipital fascia.
- lachrymal,—lacrimar *q.v.*
- lacinia (lăk'nī) *n.* [L. *lacinia*, flap] Segment of an incised leaf slender projection from margin of a thallus extension of posterior margin of proglottis over anterior part of following proglottis inner division of endopodite or stipes of maxilla of insects *fimbria*, *q.v.*
- laciniate (lăk'nīāt) *n.* [L. *lacinia* flap.] Irregularly incised, as petals fringed; *appl.* a ligament of the ankle, the internal annular ligament.
- laciniform (lăk'nīfōrm) *n.* [L. *lacinia* flap *forma*, shape.] Shaped like lacinia fringe-like.
- lacinula (lăk'nīl) *n.* [L. *lacinia* div. flap.] Small lacinia inflexed sharp point of petal.
- lacinulate (lăk'nīlūt) *n.* [L. *lacinia*, div. flap.] Having lacinulae.
- lacrimar (lăk'rīmāl) *n.* [L. *lacrimare* tear] Secreting or *peri.* tears *part* or situated near lacrimar organ *appl.* artery bone, duct glands, nerve, papillae, see also lachrymal.
- lacrimonasal (lăk'rīmōnāl) *n.* [L. *lacrima*, tear *nasus* nose.] *Peri.* lacrimar and nasal bones or duct.
- lacrimose (lăk'rīmōs) *n.* [L. *lacrima*, tear] Bearing tear-shaped pendants, as gills of certain fungi.
- lactalbunin (lăk'tālbō mīn) *n.* [L. *lac* milk; *albumen* egg-white.] An albumin found in milk.
- lactase (lăk'tās) *n.* [L. *lac* milk.] An intestinal enzyme converting lactose into glucose and galactose also found in certain plants.

**lactation** (lakti shūn) *n* [L. *lac* milk] Secretion of milk in mammary glands period during which milk is secreted.

**lacteals** (lakt'ēlīz) *n. pl.* [L. *lac* milk.] Chyliferous or lymphatic vessels of small intestine ducts which carry latex.

**lactescent** (laktēs ēnt) *a* [L. *lac* *ferre* to turn in milk.] Producing milk yielding latex.

**lacti** (lakt'ik) *a.* [L. *lac* milk.] *Perf* milk *appl.* bacilli acid.

**lactiferous** (laktif'ērōs) *a* [L. *lac* milk *ferre* to carry] Forming or carrying milk carrying latex.

**lactochrome** (lakt'ōkrōm) *n.* [L. *lac* milk Gk. *chroma* colour] A nitrogenous colouring matter in milk lactofavin, *q.v.*

**lactofavin** (lakt'ōfā'vin) *n* [L. *lac* milk *favus* yellow] Vitamin B<sub>2</sub> riboflavin *q.v.* C<sub>12</sub>H<sub>12</sub>O<sub>4</sub>N

**lactogenic** (lakt'ōjēn'ik) *a* [L. *lac* milk Gk. *gennē* producing] *Perf* or stimulating secretion of milk *appl.* a preputiary hormone inducing secretion of milk in mammals and of crop milk in the pigeon *appl.* interval between parturition and ovulation, or between parturition and menstruation.

**lactogi bulin** (lakt'ōgīsb ōlin) *n.* [L. *lac* milk Gk. *globus* dim. of *globus* globe.] The specific protein of milk, insoluble in water.

**lactoproteid** (lakt'ōpēt'ēsd) *n.* [L. *lac* milk Gk. *protos* first *oides* form.] Any milk proteid.

**lactose** (lakt'ōs) *n.* [L. *lac* milk.] Milk-sugar C<sub>12</sub>H<sub>22</sub>O<sub>11</sub>

**lacuna** (laktū nā) *n.* [L. *lacuna* cavity] A space between cells sinus urethral follicle cavity in bone small cavity or depression on surface in lichens a leaf gap. *Pls.* lacunae.

**lacunar** (laktū nār) *a* [L. *lacuna* cavity] Having resembling or *perf* lacunae.

**lacunate** (laktū nīt) *a.* [L. *lacuna*, hollow] Lacunar *perf* lacunae *appl.* collenchyma, with cell-walls

thickened where bordering inter cellular spaces.

**lacunose** (laktū nōs) *a* [L. *lacuna* cavity] Having many cavities pitted.

**lacunosorugose** (laktū nōsūrōō gōs) *a.* [L. *lacuna* cavity *rugosus* wrinkled.] Having deep furrows or pits as some seeds and fruits.

**lacus lacrimalis**,—the triangular space between eyelids which contains lacrimal caruncle and receives tears from orifices of the lacrimal ducts.

**lacustrine** (laktūs'trin) *a* [L. *lacus* lake.] *Perf* or living in or beside lakes.

**laetotropic** (lē'tērōp'ik) *laetotropic* (lē'tērōp'ōs) *a.* [Gk. *laie* left *trope* turning] Inclined, turned, or coiled to the left.

**laevulose** (lē'vūlōs) *n.* [L. *laevus* left.] Fruit sugar fructose C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>.

**lagena** (lāgē nā, lājē nā) *n* [L. *lagena* flask.] Terminal portion of the cochlear duct or scale media.

**lageniform** (lāgē'nifōrm, lājē'nifōrm) *a* [L. *lagena* flask *forme* shape.] Shaped like a flask.

**lagopodous** (lāgōp'ōdōs) *a.* [Gk. *lagos* hare *podus* foot.] Possessing hairy or feathery feet.

**Lamarckian** (lāmārk'iān) *a.* [*J. B. de Lamarck* French biologist.] Of or *perf* theories put forward by Lamarck.

**Lamarckism** (lāmārk'izm) *n.* The evolution theory of Lamarck, embodying the principle that acquired characteristics are transmissible.

**lambda** (lām dā) *n* [Gk. λ *lambda*.] The junction of lamellose and sagittal sutures.

**lambdoid** (lām dōid) *a* [Gk. λ *lambda* *oides* form.] λ-shaped; *appl.* the cranial suture joining occipital and parietal bones.

**lamella** (lāmē'lā) *n* [L. *lamella*, small plate] Any thin plate or scale-like structure the gill of an agaric.

- lamellar** (lāmēl'ār) *lam* *llat* (lām'ēāt) *a.* [*L. lamella*, small plate.] Composed of, or possessing thin plates.
- lamellibranchiate** (lāmēl'ibrāng'kiāt) *a.* [*L. lamella* small plate *branchiae* gills.] Having plate-like gills on each side with bilaterally compressed symmetrical body like bivalve.
- lamellicorn** (lāmēl'ikōrn) *a.* [*L. lamella*, small plate *cornu* horn.] Having antennal joints expanded into flattened plates.
- lamelliferous** (lām'ēl'if'ērūs) *a.* [*L. lamella*, small plate *ferre*, to carry.] Having small plates or scales.
- lamelliform** (lāmēl'ifōrm) *a.* [*L. lamella*, small plate *forma* shape.] Plate-like.
- lamellirostral** (lāmēl'irōs'trāl) *a.* [*L. lamella*, small plate *rostrum*, beak.] Having inner edges of bill bearing lamella-like ridges.
- lamina** (lām'inā) *n.* [*L. lamina*, plate.] A thin layer or scale blade of leaf one of thin plate-like expansions of sensitive tissue which fit into grooves on inside of horse-hoof.
- lamina choriocapillaris**,—capillary plexus constituting inner layer of choroid.
- lamina cribrosa**,—cribelliform plate, *g.s.* membranous portion of sclera at site of attachment of optic nerve and with perforations for axons of ganglion cells of retina.
- lamina perpendicularis**,—median process of mesethmoid or ethmoid forming proximal or bony part of nasal septum.
- lamina terminalis**,—thin layer of grey matter forming anterior boundary of third ventricle of brain.
- lamina vasculosa**,—outer layer of choroid beneath suprachoroid membrane.
- laminar** (lām'inār) *laminiform* (lām'inifōrm) *a.* [*L. lamina*, plate *forma*, shape.] Consisting of plates or thin layers *laminous*.
- laminarian** (lām'ināl rīkū) *n.* [*Laminaria*, genus of brown seaweeds. Appl. none between 1800 and 1900 about fifteen families.]

- lamination** (lām'ināshn) *n.* [*lamina*, plate.] The breaking of thin plates or layers; arrangement in layers a nerve tract at nervous cortex.
- laminipartner** (lām'inip'ārtē) *a.* [*lamina*, plate *partner* who helps.] Having scales or scutes arranged behind in a scaly ridge.
- lanate** (lān'āt) *a.* [*L. lanus* woolly.] Woolly; covered with shag-like processes giving warty appearance to surface.
- lance-linear** (lāns'linēār) *a.* [*lanceus*, lance; *linea* line.] Lanceolate and linear.
- lanceolate** (lāns'olēāt) *a.* [*lanceus*, lance; *olus* to grow.] Lanceolate and linear.
- lance-oblong** (lāns'ōblōng) *a.* [*lanceus*, lance; *oblongus* oblong.] Oblong with tapering ends.
- lanceolate** (lāns'olēāt) *a.* [*lanceus*, lance; *olus* to grow.] Lanceolate and linear.
- lance-oval** (lāns'ōvāl) *a.* [*lanceus*, lance; *ovus*, oval.] Intermediate between lanceolate and oval.
- lance** (lāns'ēt) *n.* [*L. lanceus*, lance.] as in beam.
- lance plates**,—plates of water-vascular system of starfish.
- Langerhans**,—*see* Langerhans cells.
- Langhans cells** [*Langhans* German histologist.] Cells of inner layer of layer of Langhans.
- languet, languette** [*F. languette* size, process on branch of leaf.]
- lanyary** (lām'lārī) [*lany* to tear to pieces.] Canine tooth.
- lantern**,—*see* Arborescent lantern.
- lanthanin** (lānthā'nin) [*lanthanum* to clear up.] (synchro-  
magnetin Holn, *g.s.*)
- lanuginous** (lān'u-jīnūs) [*L. lanugo* down.] Covered with down of lanate.



- lanugo** (lándúgú) *n.* [*L. lanugo* down.] The downy covering on a foetus begins to be shed before birth.
- lapidicolous** (láp'ídik'ólús) *a.* [*L. lapis* stone *colere* to cultivate.] *Appl.* animals that live under stones.
- lapillus** (láp'ilús) *n.* [*L. lapillus* pebble.] A small otolith in utricle of teleosts.
- lappaceous** (láp'shús) *a.* [*L. lappae* bur] Prickly
- lappet** (láp'et) *n.* [*N.E. lappet* loose hanging part.] One of paired lobes extending downwards from distal end of stomodaeum in jelly-fish
- lobe of a sea-anemone gullet  
wattle of a bird.
- larmier** (lár'myé) *n.* [*F. larmie* tear] Tear pt. sacculus lacrimalis.
- larva** (lár'vá) *n.* [*L. larva* ghost.] An embryo which becomes self-sustaining and independent before it has assumed the characteristic features of its parents.
- larval** (lár'vál) *a.* [*L. larva* ghost] *Peri.* larva in the larval stage.
- larviform** (lár'vifórm) *a.* [*L. larva* ghost *forma* shape] Shaped like a larva.
- larviparous** (lár'vip'árits) *a.* [*L. larva* ghost *parere* to produce.] Producing live larvae.
- larvivorous** (lár'viv'órús) *a.* [*L. larva* ghost *vorare* to devour] Larva eating
- larval** (lár'vál) *n.* [*L. larva* small larva.] Young larva.
- laryngeal** (lár'ínj'ál) *a.* [*Gk. larynx* upper part of windpipe.] *Peri.* or near the larynx *appl.* artery vein, nerve etc.
- laryngopharynx** (lár'ínj'gólár'íngk) *n.* [*Gk. larynx* larynx *pharynx* gullet.] Part of pharynx between soft palate and oesophagus.
- laryngotracheal** (lár'ínj'gotrá'kéál) *a.* [*Gk. larynx* windpipe *L. trachea* trachea] *Peri.* larynx and trachea *appl.* embryonic groove and tube.
- larynx** (lár'íngk) *n.* [*Gk. larynx* larynx] The organ of voice in most vertebrates except birds.
- lasso cells**,—filamented hemispher-  
ical adhesive cells investing tentacles of Ctenophora.
- late type**,—a mutant with one or more supernumerary chromosomes as compared with its parent (from *Oenothera lutea*).
- latebra** (lár'ébrá) *n.* [*L. latebra*, hiding-place.] The bulb or flask-shaped mass of white yolk in eggs.
- latebricole** (lár'ébríkol) *a.* [*L. latebra* hiding-place; *colere* to inhabit.] Inhabiting holes.
- latent** (lá'sént) *a.* [*L. latens* hidden.] Lying dormant but capable of development under favourable circumstances *appl.* buds resting stages characters.
- latent bodies**,—the resting stage of certain Haemoflagellata.
- latent period**,—the time interval between completion of presentation of a stimulus and the beginning of reaction reaction time.
- lateral** (lár'étrál) *a.* [*L. later* side.] *Peri.* or situated at a side or at a side of an axis.
- lat chain theory**,—*see* side-chain.
- lateral line**—longitudinal line on each side of body of fishes marking position of sensory cells.
- lateral m. sentories**,—the mesenteries of Zoantharia, excluding directive or dorsal and ventral pairs.
- lateralis** (lár'étrá'ítis) *n. plur.* [*L. later* side.] The lateral plates of Ctenopoda.
- laterigrade** (lár'étrígrád) *a.* [*L. later* side *gradus* step] Walking sideways as crab.
- laterinerv** (lár'étrí'nerv) *a.* [*L. later* side *nervus* nerve] With lateral veins.
- laterit** (lár'ért) *n.* [*L. later* brick.] *Appl.* tropical red soils containing alumina and iron oxides and little silica owing to leaching under hot, moist conditions.
- laterocranium** (lár'étrók'ráníám) *n.* [*L. later* side *cranium* skull.] Area of insect head comprising genae and postgenae.
- latero-sensory** (lár'étréén'sórt) *a.* [*L. later* side *sensus* sense.] *Appl.* system of lateral sense-organs in fishes, or lateral line system.

**laterosternites** (lăt'ērōstēr'nīts) *n. plu.*  
[*L. later* side sternum breast bone.] Sclerites at side of sternum, as in Dermaptera and Isoptera.

**laterotergites** (lăt'ērōtēr'jīts) *n. plu.*  
[*L. later* side tergum back.] Small sclerites adjoining tergum of abdominal segments in some crustaceans and insects.

**latex** (lăt'ēks) *n.* [*L. latex* liquid.] A milky or clear sometimes coloured, juice or emulsion of diverse composition found in some plants, as in spurge, rubber trees, certain agaves, etc.

**laticifer** (lăt'ēfēr) [*L. later* a liquid *ferre* to carry] Any latex-containing cell, series of cells, or duct.

**laticiferous** (lăt'ēfēr'ūs) *a.* [*L. later* liquid *ferre* to carry] Conveying latex *appl.* cells, tissue, vessels.

**latiplantar** (lăt'iplān'tār) *a.* [*L. later* side *plantis* sole of foot.] H. wing hinder tarsal surface rounded.

**latirostral** (lăt'irōstrāl) *a.* [*L. later* broad *rostrum* beak.] Broad-beaked.

**latiseptat** (lăt'isēp'tāt) *a.* [*L. later* broad; *sephum*, septum.] Having broad septum in the silicle.

**latitudinal furrow**—one running round segmenting egg above and parallel to the equatorial.

**Laurer Stieda canal**,—a canal leading from junction of oviduct and vitelline duct to opening on dorsal surface in trematodes.

**lauri oxylon** (lōr'indōr'lōn) *n.* [*L. laurus* laurel; *Gk. xylon* wood.] Any fossil wood.

**law of acceleration**,—the generalization that organs of greater importance develop more quickly.

**lax** (lāks) *a.* [*L. laxus* loose.] Loose, as *appl.* panicle.

**layer of Langhans** [*F. Langhans* German histologist]. Cytotrophoblast.

**leader** (lē'dēr) *n.* [*A.S. leoden*, to lead.] Highest shoot or part of trunk of a tree.

**leaf** (lēf) *n.* [*A.S. leaf* leaf.] An

expanded outgrowth of a stem usually green.

**leaf buttress**,—lateral prominence on shoot axis, due to underlying leaf primordium, representing leaf-base.

**leaf-cushions**,—prominent persistent leaf-bases, furnishing diagnostic characters in certain extinct plants.

**leaf-gap**,—mesh of stelar network, corresponding to site of leaf attachment in ferns gap in vascular cylinder of stem, parenchymatous region associated with leaf-traces lacuna.

**leaflet**,—a small leaf individual unit of compound leaf.

**leaf-stalk**,—petiole.

**leaf trace**,—vascular bundles extending from stem bundles to leaf-base. *Cf.* girdle bundles.

**leucocytes** (lēukōsītēs) *n. plu.* [*Gk. leukos* ecruia; *kytos* hollow] Cells containing glycogen and developing from and regressing to leucocytes, found in blood of Arachnida at moulting.

**lechniodont** (lēk'nōdōnt) *n.* [*Gk. lechnios* coarsely *odous* tooth.] With vomerine and pterygoid teeth in row nearly transverse.

**lecithalbumin** (lēk'thāl'būmīn) *n.* [*Gk. lekithos* egg-yolk *L. albumen*, white of egg] A substance consisting of albumin and lecithin, of various body organs.

**lecithelles** (lēk'thēlēs) *n. plu.* [*Gk. lekithos* egg-yolk.] Yolk granules in hypoblastic or other lecitoblasts.

**lecithin** (lēk'thīn) *n.* [*Gk. lekithos* egg-yolk.] A phosphorised fat or phospholipids of cell-protoplasm.

**lecith blast** (lēk'thōblāst) *n.* [*Gk. lekithos* egg yolk *blastos* bud.] In developing eggs, the yolk-containing blastomeres.

**lecithocoel** (lēk'thōkōēl) *n.* [*Gk. lekithos* egg-yolk *kōelos* hollow] Segmentation cavity of holoblastic eggs.

**lectoall typ** (lēk'tōl'ōtīp) *n.* [*Gk. lekthos* chosen *allos* other *typos* pattern.] A specimen of the opposite sex to that of the lectotype and subsequently chosen from the original material.

- lectotype (lĕk'tŏip) *n.* [Gk. *lektos* chosen *typos* pattern.] A specimen chosen from syntypes to designate type of species.
- legume (lĕg'ūm) *n.* [L. *legumen* pulse.] Dehiscent one-celled, two-valved carpel as pod of pea or bean.
- legumin (lĕg'ū mīn) *n.* [L. *legumen* pulse.] A globulin found in seeds of Leguminosae.
- leiotrichous (lĕō'trīk'ūs) *a.* [Gk. *leios* smooth *trichos* hair.] Having straight hair leiothric.
- leiotropic, —lacotropic, *q.v.*
- lemma (lĕm'ā) *n.* [Gk. *lemma*, husk.] A valve or flowering glume lower or outer palea, bract with axillary flower.
- lemniscus (lĕm'nī'sk'ūs) *n.* [Gk. *lemniskos* fillet.] One of paired club-shaped organs at base of scaphocephalan proboscis a fillet of fibres on each side of cerebral peduncles.
- lentile (lĕnt'ik) *a.* [L. *lentis* smooth.] Lentic, *q.v.*
- lens (lēnz) *n.* [L. *lens* lentil.] A transparent part of eye, which focuses rays of light on retina crystalline lens modified portion of cornea in front of each element of a compound eye.
- lenti (lēn'tik) *a.* [L. *lentus* slow.] *Appl* or *part* standing water living in swamp pond, or lak lentic *Appl* lotic.
- lenticef (lēn'tī'sēf) *n.* [L. *lens* lentil.] Ventilating pore in angiosperm stems or roots canal cork a lenticular gland.
- lenticular (lēntīk'ylār) *a.* [L. *lenticula*, dim of *lens* lentil.] Shaped like a double convex lens lentiform *Appl* glands, lymphoid structures between pyloric glands. *n.* Tip of mucus articulating with stapes, often ossified as separate unit.
- lenticulate (lēntīk'ylāt) *a.* [L. *lens* lentil.] Meeting in sharp point depressed, circular and frequently ribbed.
- lentiform (lēn'tīfōrm) *a.* [L. *lens* lentil *forma* shape.] Lentil-shaped lenticular *Appl* nucleus, the extraventricular portion of corpus striatum.
- lentiferous (lēntī'fēr'ūs) *a.* [L. *lentis* lentil *ferre* to bear.] Furnished with a lens.
- lentiginose (lēntī'jīn's) *lentiginous* (lēntī'jīn's) *a.* [L. *lentigo* freckle.] Freckled speckled bearing numerous small dots.
- lento-capillary point, —point, just above wilting coefficient, at which flow of water towards root hairs is impeded on account of surface tension resistance.
- leotropic, —lacotropic *q.v.*
- lepidodendroid (lēp'īdōdēn droid) *a.* [Gk. *lepos* scale *dendron* tree *oides* form.] *Part* Lepidodendron having scale-like leaf-scars.
- lepidoid (lēp'īdōid) *a.* [Gk. *lepos* scale *oides* form.] Resembling a scale or scales.
- lepid morial, —*part* or composed of lepidomorpha.
- lepidomerium (lēp'īdōmēr'ītm) *n.* [Gk. *lepos* scale *merion* constituent part.] Small scale or unit of composite scale with bony base and conical or conoid crown of dentine containing pulp cavity and sometimes covered with enamel. *Plur* lepidomora.
- lepidophyte (lēp'īdōfīt) *n.* [Gk. *lepos* scale *phyton*, plant.] A fossil plant of fern family.
- lepidopteron (lēp'īdōp'tēr'ōn) *a.* [Gk. *lepos* scale *pteron* wing.] Having wings covered with minute overlapping scales *part* moths, butterflies.
- lepidosteoid (lēp'īdōstē'ōid) *a.* [Gk. *lepos* scale *osteon* bone *oides* form.] *Appl* ganoid scale lacking coeloma.
- lepidote (lēp'īdōt) *a.* [Gk. *lepidotes* scaly.] Covered with minute scales.
- lepidotic (lēp'īdōt'ik) *a.* [Gk. *lepos* scale *scaly*] *Appl* an acid found in wings of some Lepidoptera.
- lepidotrichia (lēp'īdōtrīk'īā) *n.* *plur* [Gk. *lepos* scale *trichos* hair.] The bony actinotrichia of teleosts.

- 1 pocyte (lɛp'ɔɪt) *n* [Gk. *lepis* husk *kytos* hollow.] A cell with a defining cell-wall, *appl* gymnocyte.
- lepospondylous (lɛp'ɔspɔn'di:əs) *a*. [Gk. *lepis* husk *spondylus* vertebra.] Having amphicelous, or hour-glass shaped, vertebrae.
- 1 ptocoe tric (lɛp'tɔ:ən'trik) *a*. [Gk. *leptus* slender *hētrous* centre.] *Appl.* concentric bundle with central leptome.
- 1 ptoccephaloid (lɛp'tɔ:kɛf'ɔləɪd, -ɛf-) *a*. [Gk. *leptus* slender *kephale* head *oides* form.] Resembling or having the shape of eel larvae.
- 1 ptocercal (lɛp'tɔ:ər'tɛkəl) *a*. [Gk. *leptus* slender *hētrous* tail.] With long slender tapering tail as some fishes leptocercous, *appl* protozoa.
- 1 ptodactylous (lɛp'tɔdɛk'tiləs) *a*. [Gk. *leptus* slender *dactylus* finger.] Having slender digits.
- 1 ptodermatous (lɛp'tɔdɛr'mɛtəs) *a*. [Gk. *leptus* slender *derma* skin.] Thin-skinned *appl* various thecae leptodermic, leptodermous.
- 1 ptoid (lɛp'tɔɪd) *[Gk. leptus slender sides form.]* On of the thin-walled cortical cells forming strand projecting into the central cylinder of rhizome in mosses tubular cell in stem of certain pteridophytes.
- 1 ptom (lɛp'tɔm) *n*. [Gk. *leptus* slender.] Phloem-like part of vascular tissue of plant stems leptomen-tous best also leptom.
- 1 ptomeninge (lɛp'tɔmɛnɪŋ'jɛs) *n*. *plu* [Gk. *leptus* slender *meninge*, membrane.] The pia mater and arachnoid membrane.
- leptonema (lɛp'tɔnɛ'mə) *n*. [Gk. *leptus* slender *nema*, thread.] Fine unpaired chromosome thread = leptotene.
- 1 ptrophloem (lɛp'tɔf'lo:əm) *n* [Gk. *leptus* slender *phloem* smooth bark.] Rudimentary bast tissue.
- leptophyllous (lɛp'tɔf'ɪl'əs) *a*. [Gk. *leptus* slender *phyllon* leaf.] With slender leaves having small leaf area, under 5 square millimetres.
- 1 ptosom (lɛp'tɔsɔm) *a*. [Gk. *leptus* slender some body] Tall and slender *appl* euryome.
- leptosporangiate (lɛp'tɔspɔr'ɛŋ'jɛt) *a*. [Gk. *leptus* slender *spora* seed *angium* vessel.] With sporogenous tissue developing from outer cell of periclinal division. *Appl* eusporangiate.
- leptostrotate (lɛp'tɔstrɔ'tɛt) *a*. [Gk. *leptus*, slender *strotus* covered.] With ambulacral plates narrow and crowded together as in certain Stelleroides.
- leptotene (lɛp'tɔtɛn) *n* [Gk. *leptus* slender *tenia* band.] Early stage of the prophase of meiosis where chromatin is in form of fine threads.
- leptotrombicul (lɛp'tɔtrɔmbɪk'ul) *n*. [Gk. *leptus* slender lt. *trombus*, trumpet.] The larval form of trombicula.
- leptoxyl m (lɛp'tɔks'ɪlɛm) *n* [Gk. *leptus* slender *xylon* wood.] Rudimentary wood tissue.
- lepto-xygotous (lɛp'tɔf'gɔtɔn) *a*. [Gk. *leptus* slender *xygon*, yoke; *tenos* band.] *Appl.* transition stage between leptomena and xygonema.
- 1 ptus (lɛp'tɪs) *n* [Gk. *leptus* small.] The six-legged larva of mites.
- lethal (lɛ'tɪəl) *a*. [L. *letum* death.] Causing death of parasite fatal or deadly in relation to a particular host *appl.* hereditary factor which so influences development that the individual is rendered non-viable. A lethal factor.
- 1 thality (lɛ'tɪəl'ɪtɪ) *n* [L. *letum*, death.] The ratio of fatal cases to total number of cases affected by a disease or other harmful agency.
- 1 ceine (lɛ'sɛɪn) *n*. [Gk. *leukos* white.] An amino acid formed during decomposition of proteins.
- 1 acine (lɛ'sɛɪn) *n*. [Gk. *leukos* white.] Amino-caproic acid found as constituent of pancreatic juice and of various tissues and organs also of some plants C<sub>6</sub>H<sub>13</sub> O<sub>2</sub> N.
- 1 clam (lɪ klɪm, loo-) *n*. [Gk. *leukos* white.] The presence of white plumage or pelage in animals with pigmented eyes and skin.

- leucit** (lō sh) *n* [Gk *leukos* wht] A colourless plastid.
- leuco**—*also* leuko-
- leucoblast** (lō'kōblāst loo-) *n* [Gk. *leukos* white *blastos* bud.] A colourless blood-corpuscle in development.
- leucocarpous** (lō'kōkār'pōs, loo-) *n* [Gk. *leukos* white *karpos* fruit.] With the fruit white.
- leucocyan** (lō'kōf'ān loo-) *n* [Gk. *leukos* white *kyanos* dark blue] A pigment found in certain algae.
- leucocyte** (lō'kōst loo-) *n* [Gk. *leukos* white *kytos* hollow] An amoebocyte a colourless blood corpuscle leukocyte.
- leucocytogenesis** (lō'kōst'oj'n eals loo-) *n* [Gk. *leukos* white *kytos* hollow *genesis* descent.] Leucocyte formation leucopoiesis.
- leucophore leukophore** (lō'kōfōr loo-) *n* [Gk. *leukos* white *phoros* to bear] A yellow pigment bearing cell ndocyte.
- leucoplastid** (lō'kōplāstīd loo-) *n* *plu* [Gk. *leukos* white *plastis* formed *dian dian*] Colourless plastids from which amylo- chloro- and chromoplastids arise.
- leucoplasts** (lō'kōplāsts, loo-) *n* *plu* [Gk. *leukos* white *plastis* formed.] Colourless granules of plant cytoplasm *app* bromoplasts leucoplastids.
- leucopoiesis** (lō'kōpōis'īd loo-) *n* [Gk. *leukos* white *poiesis* making] The formation of white blood corpuscles.
- leucoplerin** (s) (lō'kōp'tērīn, loo-) *n* [Gk. *leukos* wht *pteron* wing] A white wing pigment of certain Lepidoptera  $C_{12}H_{12}O N_{12}$ .
- leuko**—*see* leuco-
- levator** (lēvā'tōr) *n* [L. *levare* to raise] A name given to muscles serving to raise an organ or part *app* depressor.
- levulose**—*see* levulose *q.v.*
- Leydig's cells** [*F* *von Leydig* German anatomist]. Cells in testicular interstitial tissue.
- Leydig's duct**—*th* Wolffian duct.

- L. ydlig's organs**—minute organs on antenna of arthropods, supposed to be organs of smell.
- liana** (līān ā) lian (līān') *n* [*F* *liane* from L. *ligare* to bind.] Any luxuriant woody climbing plant of tropical or semi-tropical forests.
- Lias** (lī'ās) *n*. [*layers*] Marine and estuarine deposits of Jurassic period containing remains of cycads, insects, ammonites, saurians, and other fossils.
- liber** (lī'bē) *n*. [L. *liber* inner bark.] Inner bark bast.
- libido** (lībī'dō) *n*. [L. *libido* desire.] Excitation within body associated with instinct sexual energy psychic energy borne *q.v.* *can* vital.
- libriform** (līb'rīfōrm) *n*. [L. *liber* inner bark *form* shape] Resembling bast *app* fibres, woody later becoming septate.
- Lichen** (lī'kēn) *n* [Gk. *lichen* heben] Symbiotic relationship between fungi and algae.
- Lichenoid** (lī'kēnoid) *n* [Gk. *lichen*, lichen *reides* form.] Resembling a lichen.
- Lichenology** (lī'kēnōlōjī) *n*. [Gk. *lichen* lichen *logos* discourse] The study of lichens.
- Lieberkühn's crypts** [*J* *A Lieberkühn* German anatomist]. T bolar glands of the small intestine.
- L. big's law** [*J* *von Liebig* German chemist]. The food element least plentiful in proportion to the requirement of plants limits their growth law the minimum *q.v.*
- lien** (lī'en) [L. *lien* spleen] Spleen.
- lienal** (lī'ēnāl) *n* [L. *lien* spleen.] Pert spleen *app* artery vein nerve plexus.
- Lienulus** (lī'n'kūlūs) *n* [*Dim.* of L. *lien* spleen] An accessory spleen.
- lieogastric** (lī'ēnōgāstrīk) *n*. [L. *lien* spleen *gaster* stomach.] Pert spleen and stomach *app* artery supplying spleen and parts of stomach and pancreas *app* vein of hepatic portal system.

liorensal,—see phrenocolleal.

life-cycle—the various phases through which an individual species passes to maturity

ligament (līg'āment) *n.* [L. *ligamentum* bandage.] A strong fibrous band of tissue connecting two or more movable bones.

ligamenta flava,—yellow elastic ligaments connecting laminae of adjoining vertebrae.

ligneous (līg'ēōs) *a.* [L. *lignum* wood.] Woody of nature of wood.

lignescence (līg'ēs'ēns) *a.* [L. *lignescere* to become woody] Developing the characters of woody tissue.

lignicolous (līg'nīk'ōlūs) *a.* [L. *lignum* wood *colere* to inhabit.] Growing on or in wood.

lignification (līg'nīf'ikā'shōn) *n.* [L. *lignum*, wood *facere* to form.] Wood-formation thickening of plant cell-walls by deposition of lignin.

lignin (līg'nīn) [L. *lignum* wood.] A complex substance which associated with cellulose causes the thickening of plant cell-walls, and so forms wood.

lignivorous (līg'nīv'ōrūs) *a.* [L. *lignum*, wood *vorare* to devour] Eating wood *appl.* various insects.

lignocellulose (līg'nōsēl'sīdūs) *n.* [L. *lignum*, wood *cellula*, little cell.] Essential constituents of woody tissue lignum and cellulose combined.

lignose (līg'nōs) *n.* [L. *lignum* wood.] A variety of cellulose.

ligula (līg'ūlā) *n.* [L. *ligula*, little tongue.] A band or tænia of white matter in dorsal wall of fourth ventricle median structure between labial palps of insects lobe of parapodium in certain unclads  
ligul *g.* ligula, *g.*

ligulate (līg'ūlāt) *a.* [L. *ligula*, little tongue.] Having or *part* ligules strap-shaped as ray florets of Compositae.

ligule (līg'ūl) *n.* [L. *ligula*, little tongue.] A membranous out

growth at junction of blade and leaf-sheath or petiol small scale on upper surface of leaf base in Lepidodendrone Selaginellaceae, and Isoetes tongue-shaped corolla, as of certain florets.

liguliferous (līg'ūlīf'ērūs) *a.* [L. *ligula* little tongue *ferre* flower] Having ligulate flowers only

limacel (līm'āsh) *n.* [F. from L. *limax* slug] Coccoated estigial shell of slug.

limbiform (līm'bīf'ōrm) limacina (līm'āsh) *a.* [L. *limax* slug *forma* shape] Like slug slug shaped.

limb (līm) *n.* [A.S. *lim* limb] Branch arm leg wing expanded portion of unguiculate petal.

limbi (līm'bī) *a.* [L. *limbus* border] Bordering *appl.* a cerebral lobe, including hippocampal and cingulate gyri

limbois (līm'bōis) *a.* [L. *limbus* border] *Appl.* overlapping sutures.

limb (līm'bīs) *n.* [L. *limbus* border] Any border if distinctly marked off by colour or structure.

limen (līm'ēn) *n.* [L. *limen* threshold.] Threshold minimum stimulus, or quantitative difference in stimulation, that is perceptible boundary as between vestibule of nostril and nasal cavity limen nasi.

limicolous (līmīk'ōlūs) *a.* [L. *limen* mud *colere* to dwell.] Living in mud.

liminal (līm'nāl) *a.* [L. *limen* threshold.] *Part.* threshold *appl.* stimulus *appl.* sensation.

limit d—*appl.* chromosomes in germinal, not in somatic nuclei.

limivorous (līmīv'ōrūs) *a.* [L. *limen* mud *vorare* to devour] Mud-eating *appl.* certain aquatic animals which swallow mud.

limus ti (līm'nē'tī) *a.* [Gk. *limos* marsh.] Living in, or *part* marshes or lakes.

limnocryptophyte (līm'ōkrīp'tōfīt) *n.* [Gk. *limos* marsh *kryptos* hidden *phylon* plant.] A helophyte or marsh plant limnophyte.

**limnology** (limnôl'jî) *n* [Gk *limne* marshy lake *logos* discourse] Science dealing with biological and other phenomena *part* inland waters the study of standing waters.

**limnophilous** (limnôf'îlîs) *a*. [Gk *limne* marsh *philein* to love.] Living in fresh-water marshes also limnobiotic.

**limnophyte** (lim nôf'it) *n* [Gk *limne* marshy lake *phyton* plant.] A pond plant a helophyte

**limnoplankton** (lim nôplâng'kîon) *n* [Gk *limne* marshy lake *plankton* wandering] The floating animal and plant life in fresh-water lakes ponds, and marshes *Opp* holoplankton

**limosphere** (lîm'osfîr) *n* [Gk *limos* receptacle *sphaera* globe.] A spherical body containing a vacuole situated near blepharoplast in spermiogenesis from moose.

**linea** (lîn'îl) *n* [L. *linus* line] A line like structure or mark

**linar** (lîn'îr) *n* [L. *linus* line.] *Part* or in line tape or thread-like synthetic *appl* constitutional type

**linear-ensate**—between linea and ensiform in shape

**linear-lanceolate**—between linea and lanceolate in shape.

**linear-oblong** between linea and oblong in shape.

**linella** (lînel'î) *n* *plu* [L. *linella* fine thread.] A system of filaments in certain Sarcodina holding together the xenophya.

**lineolate** (lîn'îolît) *a* [L. *linus*, line] Marked by fine lines *striat*

**lingua** (lîng'gwâ) *n* [L. *lingua* tongue] The floor of mouth in insects hypopharynx of insects tongue or tongue-like structure.

**lingual** (lîng'gwîl) *a*. [L. *lingua* tongue.] *Part* tongue *appl* artery gyrus nerve vein etc. *appl* radula of molluscs.

**lingula** (lîng'gûlâ) *n* [L. *lingula* little tongue.] A small tongue like process of bone or other tissue as of cerebellum or phrenoid

a genus of brachiopod *ligula*, *gr*

**lingulate**—'îgulat *gr*

**linin** (lîfîn) *n*. [L. *linum* flax.] The substance of achromatic or oxyphilic reticulum of cell-nucleus.

**lininoplast** (lîn'înôplîst) *n* [L. *linum* flax Gk. *plastos* moulded.] Plasmosome *gr*

**linkage** (lîng'ketj) *n* [A.S. *lînce* link.] Tendency of certain hereditary factors to remain associated through several generations gametic coupling

**Linnaean** (lîn'î-an) *a*. [C. *Linnaeus* or *Linnaeus* Swedish naturalist.] *Part* o designating the system of classification established by Linnaeus.

**Linnaeus** (lîn'î-on) *n*. [C. *Linnaeus* Swedish naturalist.] Linnaean or taxonomic species.

**lipase** (lîp'îs) *n* [Gk. *lipos* fat.] A lipolytic or fat-splitting enzyme found in blood and in various plant and animal organs, and in various seeds.

**lip-cell**—a sporangium cell at the point of dehiscence.

**lipid** (lîp'îd) *n* *plu* [Gk. *lipos* fat.] Heterogeneous compounds soluble in fats and their solvents, including fats waxes chromatolipides, sterols glycolipides, phospholipides *lipids* / lipoids.

**lipi** *a* (lîp'îr) *n* *plu* [Gk. *lipos* fat] Compound lipides including phospholipides and cerebroside *para*.

**lipochondria** (lîp ôkôn'drîl) *n*. *plu*. [Gk. *lipos* fat *chondros* gran.] Lipoid granules in the Golgi zone Golgi prominence.

**lipochrin** (lîp ô'krîn) *n*. [Gk. *lipos* fat *achros* yellow] *Appl* yellow lipid droplet fading by light, in unpigmented base of retinal cell.

**lipochrome** (lîp ôkrôm) *n*. *plu* [Gk. *lipos* fat *chroma* colour] A more or less indefinite group of plant and animal pigments, as carotens, luteins chlorophane, rhodophane xanthophane coerythrin, etc.

**lipoclastic** (lɪp'ɔːklɪs'tɪk) *n* [Gk. *lipos* fat *klastos* broken.] Fat splitting *lipolytic*; *appt.* enzymes.

**lipogastry** (lɪp'ɔːgɪs'trɪ) *n* [Gk. *lipogastros* to be lacking *gaster* stomach.] Temporary obliteration of gastric cavity as in some sponges.

**lipogenous** (lɪp'ɔːdʒən) *n*. [Gk. *lipos* fat *genesis* birth.] Fat-producing

**lipohumour** (lɪp'ɔːhʊmər) *n* [Gk. *lipos* fat *L. humos* moisture.] A fat-soluble substance produced by nerves and acting on chromatophores.

**lipoid** (lɪp'ɔɪd) *n* [Gk. *lipos* fat *eidos* form.] Resembling a fatty substance. *n* A *lipide* one of various fat-soluble substances occurring in plants and animals as sterol carotene terpenes

**lipolytic** (lɪp'ɔːlɪtɪk) *n*. [Gk. *lipos* fat *lysis* to dissolve.] Capable of dissolving fat fat-reducing

**lip merism** (lɪp'ɔːmɪzəm) *n* [Gk. *lipos* fat *merismos* to be lacking *meros* part.] Suppression of segmentation, or coalescence of segments, as in crustaceans.

**lipopalingenesis** (lɪp'ɔːpəlɪdʒənɪsɪs) *n* [Gk. *lipos* fat *genesis* to be lacking *palaios* new *genesis* descent.] The omission of some stage or stages in phylogeny

**lipophor** (lɪp'ɔːfər) *n* [Gk. *lipos* fat *phoros* -bearing.] A wandering cell originating in neural crest and containing lipochrome

**lipostomy** (lɪp'ɔːstəmɪ) *n*. [Gk. *lipos* fat *stoma* to be lacking *stoma* mouth.] Temporary obliteration of mouth or ocellum

**lipotr** pl (lɪp'ɔːtrɒp'ɪk) *n* [Gk. *lipos* fat *trope* turn.] Influencing fat metabolism accelerating removal of fat.

**lipoxenous** (lɪp'ɔːsɪnəs) *n* [Gk. *lipos* fat *xis* to abandon *zenos* host.] Leaving the host before completion of development

**lip lla** (lɪl'ɪl) *n*. [L. *lira* furrow.] A linear pothecium of lichens.

**liss cephalous** (lɪs'ɛfə'leɪs) *n*. [Gk. *lissos* smooth *cephalos* head]

brain.] Having few or no convolutions of the brain *lissencephalic*.

**lissostegellat** (lɪs'ɔːstɛ'gɛl) *n* [Gk. *lissos* smooth *L. stegellum* whip.] Having no collar surrounding base of flagellum

**lithit** (lɪθ'ɪt) *n* [Gk. *lithos* stone.] A calcareous secretion found in connection with ear or with otocysts, lithocysts, and tentaculocysts sensory organs of many invertebrates.

**lithocarp** (lɪθ'ɔːkəp) *n* [Gk. *lithos* stone *carpos* fruit.] Fossil fruit or carpolith.

**lithocysts** (lɪθ'ɔːsɪts) *n* *pl* [Gk. *lithos* stone *cystris* bladder.] Minute sacs or grooves, containing lithites, found in various invertebrates enlarged cells of plant epidermis, in which cystoliths re formed

**lithodermis** (lɪθ'ɔːdɜːmɪ) *n* [Gk. *lithos* stone *dermis* bond.] A small plate shelly in nature found in certain brachiopods.

**lithodomus** (lɪθ'ɔːdɔːmɪs) *n*. [Gk. *lithos* stone *domos* to build.] Living in rock-holes or clefts.

**lithogenous** (lɪθ'ɔːdʒənɪs) *n*. [Gk. *lithos* stone *genesis* producing.] Rock forming or rock-building as certain corals

**lithophagous** (lɪθ'ɔːfə'gɪs) *n* [Gk. *lithos* stone *phagos* to eat.] Stone-eating as birds rock-burrowing as some molluscs and sea-urchins.

**lith philous** (lɪθ'ɔːfɪlɪs) *n* [Gk. *lithos* stone *philein* to love.] Growing on stones or rocks saxicolous.

**lithophyll** (lɪθ'ɔːfɪl) *n* [Gk. *lithos* stone *phylon* leaf.] A fossil leaf or leaf-impression.

**lithophyte** (lɪθ'ɔːfɪt) *n* [Gk. *lithos* stone *phylon* plant.] Plant growing on rocky ground

**lithosera** (lɪθ'ɔːsɜːr) *n* [Gk. *lithos* stone *L. serere* to put in row.] A plant succession originating on rock surfaces

**lithotomus** (lɪθ'ɔːdɔːmɪs) *n*. [Gk. *lithos* stone *temnein* to cut.] Stone boring as certain molluscs.



**littoral** (litrál) *a.* [L. *litus* sea-shore.] Growing or living at or near the sea-shore *appl* zone between high and low water marks also *appl* cells, fixed macrophages, lining sinuses f reticular tissue and the wall of lymph channels littoral.

**Littre's glands** [A *Littre* French surgeon] Urethral mucous glands.

**liver** (liv ér) *n.* [A.S. *lifer* liver] The bile-secreting gland f vertebrates digestive gland f some invertebrates.

**liver pancreas**,—an organ in mol. loca and crustaceans combining functions of liver and pancreas.

**lobar** (lô'bâr) *a.* [L. *lobus* lobe] Of or *pert* lobe

**lobate** (lô'bât) *a.* [Gk. *lobos* l be] Divided into lobes lobose.

**lobe** (lôb) *n.* [L. *lobus* from Gk. *lobos* lobe] Any rounded projection f an organ lobus *a* flap-like structure on toes f certain birds

**lobed** (lôbd) [Gk. *lobos* lobe.] Having margin cut *≡* into rounded divisions by incisions which reach less than half way to mid-rib

**lobopodia** (lôb ôpô dia) *plm.* [Gk. *lobos* l be *podis* foot] Blunt pseudopodia f Protozoa.

**lobose** (lôb ôs) *a.* [Gk. *lobos* lobe.] Divided into lobes lobate.

**lobular** (lôb ôlâr) *a.* [Gk. *lobos* l be.] Like *part* small lobes

**lobulate** (lôb ôlâr) *a.* [Gk. *lobos* lobe.] Divided into small lobes

**lobul** (lôb ôl) [Dim. of L. *lobus* lobe] A small lobe or subdivision of lobe lobulus.

**lobus** (lô'bûs) [L. *lobus* lobe.] Lobe portion of an organ, as f glands and brain delimited by fissures septa.

**local sign**,—characteristic quality of tactile or other sensation associated with point of stimulation.

**localisati** *n.* (lô'kalîsâ shûn) [L. *localis* local.] Determination f position restriction to limited area restriction of pairing and chiasma formation at pachytene to one part f the chromosome

**localisation of function**,—reference to different parts of brain as communicating centres of various senses.

**localisation of sensation**,—identification on surface of body of exact spot affected

**locellus** (lô'sêl'ûs) *n.* [L. *locellus* from *locus* place] A small compartment of an ovary

**location** (lô'sîl shûn) *n.* [L. *locus* place] Local differences in abundance or proportion of dominant species local faciation.

**locomotor rods**,—hooked or knobbed rods for crawling on ventral surface of certain Nematoda.

**locular** (lô'kûlâr) *a.* [L. *loculus* little place] Containing or composed of loculi loculate.

**locul** —loculus.

**loculicidal** (lô'kûlâr'dal) *a.* [L. *loculus* compartment *caedere* to cut.] Dehiscant dorsally down middle of carpels.

**loculus** (lô'kûlûs) *n.* [L. *loculus* compartment.] A small chamber or cavity of an ovary or of an anther cavity between septa in certain Coelenterata chamber of f ramuliferous shell.

**locus** (lô'kûs) *n.* [L. *locus* place.] Position of gene in the chromosome location of a stimulus.

**locusta** (lô'kûs tâ) *n.* [L. *locusta*, locust.] Spikelet of grasses locust.

**lodical** (lô'dîkal) *n.* [L. *lodiceus*, coverlet.] A scale at base of ovary in grasses, supposed to represent part of a perianth.

**lodix** (lô'dîks) *n.* [L. *lodicis* blanket.] A ventral sclerite of seventh abdominal segment, covering genital plat in Lepidoptera.

**logotype** (lôg ôtip) *n.* [Gk. *logos* word *typos* pattern.] A genotype by subsequent designation, not originally described as such.

**loma** (lô'ma) *n.* [Gk. *loma* hem.] A thin membranous flap forming fringe round an opening fringe of toe in birds.

most m (lō mōstōm) *a.* [Gk. *loma*, hem *stoma*, mouth.] Having margin of lip recurved or reflected. oment.—lomentum.

omentaceous (lō'mētāk shūs) *a.* [L. *lomentaceum* bean meal.] Part resembling or having lomenta.

omentum (lōmēt'ŭm) *n.* [L. *lomentaceum* bean meal.] A legume or pod constricted between seeds. loment. long-day—*appl.* plants in which the flowering period is hastened by relatively long photoperiod ordinarily more than 12 hours.

longicorn (lōn'j(kōrn) *a.* [L. *longus* long *cornu* horn.] Having long antennae; *appl.* certain beetles.

longipennate (lōn'jipēn'it) *a.* [L. *longus* long *pennis* wing.] Having long wings, or long feathers.

longirostral (lōn'jirōstrāl) [L. *longus* long *rostrum* beak.] With long beak longirostrate.

loph (lōf) *n.* [Gk. *lophos* crest.] Crest which may connect cones in teeth and so form ridge.

1 phloestomat (lōf'kōstōmēt) *a.* [Gk. *lophos* small crest *stoma*, mouth.] With crested conceptacle-opening.

1 phobranchiate (lōf'brāng'kiēt) *a.* [Gk. *lophos* crest *branchia* gills.] With tufted gills.

1 phocaltrop (lōf'okāl'trōp) [Gk. *lophos* crest *A.S.* *calltroppe* kind of thistle.] A sponge spicule with rays crested or branched.

lophocercal (lōf'ōsēr'kāl) *a.* [Gk. *lophos* crest *herkus* tail.] Having rxyiens caudal fin like ridge round end of vertebral column.

lophodont (lōf'ōdōnt) *a.* [Gk. *lophos* crest *odous* tooth.] Having transverse ridges on the cheek-teeth grinding surface.

lophophor (lōf'ōfōr) *n.* [Gk. *lophos* crest *phorōn* to carry.] A horse-shoe shaped tentacle supporting organ in Polyzoa and Brachlopoda.

lophosal odont (lōf'ōsāl'nodōnt) [Gk. *lophos* crest, *salous* moon *odous* tooth.] Having cheek-teeth ridged with crescentic cuspld ridges on grinding surface.

1 phosteon (lōfōs'tēōn) *n.* [Gk. *lophos* crest *osteon* bone.] The keel-ridge of sternum.

lophotriaene (lōf'ōtri'ēōn) *n.* [Gk. *lophos* crest *trina* trident.] Lophocaltrops, *g.*

lophotrichous (lōf'ōtrikūs) *a.* [Gk. *lophos* tuft *trichis* hair.] Having long whip-like flagella with tuft of flagella at one pole *appl.* bacteria; lophotrichate lophotrichic.

loral (lōrāl) *a.* [L. *lorum* thong.] Part, or situated at the lore.

lorate (lōrāl) *a.* [L. *lorum* thong.] Strap-shaped.

lore (lōr) *n.* [L. *lorum* thong.] Space between bill and eyes in birds.

lorica (lōr'ikā lōr'ikāl) *n.* [L. *lorica* corselet.] A protective external case found in rotifers infusorians, and diatoms.

loricate (lōr'ikāl) *a.* [L. *lorica* corselet.] Covered with protective shell scales.

lorication mem *t.*—the occasion of deposition of silica or calcium carbonate for an entire skeleton at one time dictyotic moment.

loral m (lōrāl'm) *n.* [L. *dim.* of *lorum* thong.] The small strap-shaped and branched thallus of certain lichens.

lorum (lōr'm) *n.* [L. *lorum* thong.] The piece of under jaw on which submentum lies in certain insects dorsal plate protecting pedicel in spiders.

lotio (lō'tik) *a.* [L. *lotio* flowed against.] *Appl.* or *part.* running water living in brook or river *appl.* lentic.

Louisa, angl of [*1* Louis French surgeon] *Angulus Ludovici* sternal angle.

loxodont (lōk'odōnt) *a.* [Gk. *loxos* oblique; *odous* tooth.] Having molar teeth with shallow grooves between the ridges.

luciferase (loo'fifērās) *n.* [L. *lux* light *ferr* to carry.] An oxidizing enzyme which acts on luciferin, causing luminescence photogenin.

- luciferin (loo'siférin) *n* [*L. lux* light *ferr* to carry] Intracellular or extracellular substance oxidised by luciferase, causing luminescence photophobein.
- lumbar (lûm'bâr) *a*. [*L. lumbus* loin.] *Peri* or near the region of the loins *appl* artery vein vertebral plexus, gland.
- lumbocostal (lûm'bôkôs'tâl) *a* [*L. lumbus* loin *costa* rib.] *Peri* loins and ribs *appl* arch ligament.
- lumbosacral (lûm'bôs'sâkrâl) *a*. [*L. lumbus* loin *sacrum* sacred.] *Peri* loins and sacrum *appl* nerve and trunk, plexus.
- lumbriiform (lûmbrits'fôrm) *l* mbricoid (lûm'brikôid) *a*. [*L. lumbricus* earth-worm *forma* shape *Gk. eular* form.] Like worm.
- lumen (lû mén, loo-) *n*. [*L. lumen* light.] The cavity of tubular part of organ central cavity of plant cell.
- luminescent organs, — specialised organs for the production of light found in various plant and animal organisms.
- lunar (lû nâr loo-) *a*. [*L. luna* moon] *appl* carpal bone on lunare or lunatum, also called semilunar and intermedium lunata.
- lunat (lû nât loo-) *a*. [*L. luna* moon] Somewhat crescent-shaped semilunar.
- lunatum, — semilunar bone.
- lucette (lûnêtt) *n*. [*F. Lucettes* spectacles] Transparent lower eyelid females.
- lung (lûng) *n* [*A.S. lunge* lung] The paired or single respiratory organ of air-breathing higher animal forms.
- lung book, — the respiratory organ of Scorpionidae formed like purple with numerous compartments.
- lunula (lû nûlâ, loo-) *n* [*L. lunula* small moon.] Lunule.
- lunular (lû nûlâr loo-) *a*. [*L. lunula* small moon.] With crescent-shaped marking, lunulate.
- lunul (lû nûl loo-) *n*. [*L. lunula* small moon.] A crescent-shaped structure or marking lunula small crescentic sclerite, the frontal lunul above antennal bases in certain Diptera white opaque portion of nail near root.
- lunulet (lû nûlêtt, loo-) *n* [*L. lunula* small moon.] A small lunule.
- lupulin (lû pûllin loo'pûllin) *n*. [*L. lupulus* hop.] The resinous glandular scales of hops an organic compound, bitter and acrid, obtained from these  $C_{28}H_{40}O_6$ .
- luteal (lû'têâl loo-) *a*. [*L. luteus* orange-yellow] *Peri* or like cells of corpus luteum *appl* lutein and paralutein cells *appl* hormone progesterone.
- lutein (lû'têin loo-) *n*. [*L. luteus* orange-yellow] The yellow xanthochrome pigment of egg yolk and corpus luteum  $C_{40}H_{56}O_6$ .
- lutein cells, — modified granulosa cells during formation of corpus luteum follicular lutein cells, *appl* lutein cells of theca interna.
- lutelation (lû'têinâshûn) *n*. [*L. luteus* orange yellow] Corpus luteum formation lutelisation.
- lutelisation (lû'têinâshûn loo-) *n* [*L. luteus* orange-yellow] The formation of corpus luteum.
- lutelising hormone — a pituitary hormone which stimulates thecalutein cell formation and interstitial cells (testis LH prolactin).
- lutosterone — progesterone progestin.
- lutetrophil (lû'têotrôf'ik) *a* [*L. luteus* orange yellow *Gk. trophos* nourishment.] *Appl* hormone which assists in maintaining corpus luteum and may also be luteogenic.
- lychnidial (lûknôd'îâl) *a*. [*Gk. lychnidion* small lamp] Luminescent.
- lycops (lû'kôptn) *n*. [*L. Lycopersicon* tomato, from *Gk. lytopersicon*.] The red carotenoid pigment of fruits of tomato rose, etc.
- lycopin  $C_{40}H_{56}$ .
- lygophil (lû'gôfil) *a* [*Gk. lygos* shadow *philos* friend] Prefer night shade or darkness.

lymph (lîmf) *n* [L. *lymphæ* water]  
An alkaline colourless fluid contained in lymphatic vessels.

lymph heart,—contractile expansion of a lymph vessel where it opens into a vein in many vertebrates.

lymphatic (lîmfî'tîk) *a*. [L. *lymphæ* water] Pert. or conveying lymph.

lymphocyte (lîmf'fôit) *n*. [L. *lymphæ*, water Gk. *kylas* hollow] A small mononuclear colourless corpuscle of blood and lymph.

lymphogenic (lîmf'fôjén'îk) *a*. [L. *lymphæ*, water Gk. *genes* producing] Produced by lymph-glands.

lymphogenous (lîmf'fôjén'ts) *a*. [L. *lymphæ*, water Gk. *genes* producing] Lymph-forming.

lymphoid (lîmf'fôid) *a*. [L. *lymphæ*, water Gk. *eidos* form.] *Appl* retiform tissue with meshes largely occupied by lymph corpuscles adjoined.

lymphoidocyte (lîmf'fôid'fôit) *n*. [L. *lymphæ* water Gk. *eidos* form *kylas* hollow] Haemocytoblast.

lymphomyelocyte (lîmf'fôim'fôit) *n*. [L. *lymphæ*, water Gk. *myelos* marrow *kylas* hollow] Myeloblast.

lyochromes (lî'ôkrôms) *n. pl.* [Gk. *lysis* to loose *chroma* colour] Water-soluble yellow cell pigments, or flavins, including vitamin B<sub>2</sub>.

lyocytosis (lî'ôsit'ôis) *n*. [Gk. *lysis*, to loose *kylas* hollow] Haemolysis by extra-cellular digestion, as in insect metamorphosis.

Lyonnet's glands,—paired accessory silk glands in lepidopterous larvae. Filippi glands.

lyophil (lî'ôfil) *a*. [Gk. *lysis* to loose *philos* loving] *Appl* solutions which, after evaporation to dryness go readily into solution again on addition of fluid of lyophobic.

lyophobic (lî'ôfôb) *a*. [Gk. *lysis* to loose *phobos* fear] *Appl* solutions which after evaporation to dryness, remain as solid of lyophil.

lyotropic (lî'trôp'îk) *a*. [Gk. *lysis* to loose *trope* turn.] *Appl* solutions which are dependent on changes in the solvent itself.

lyra (lî'ä) *n* [Gk. *lyra* lyre.] Triangular lamina or psalterium joining lateral parts of fornx, marked with fibres as lyre; a lyrate pattern as on some bones series of chitinous rods forming part of the stridulating organ certain spiders.

lyrate (lî'rat) *a*. [Gk. *lyra* lyre.] Lyre-shaped *appl* certain leaves.

lyriform (lî'rîfôrm) *a*. [L. *lyra* lyre *forma* shape.] Lyre-shaped *appl* a sensory organ, the lyra, in spiders.

lyactini (lî'aktî'nîk) *a*. [Gk. *lysis* loosing; *aktis* ray] Of Stelleroides, having podia limited to lower half of body instead of continued to pical plates of desmactinic.

lyigenous (lîj'éns) *a*. [Gk. *lysis* loosing *genes* producing] *Appl* formation of tissue cavities caused by degeneration and breaking down of cell-walls in centre of mass.

lyals (lî'äls) *n*. [Gk. *lysis* loosing] Any substance capable of causing dissolution or lysis of cells or bacteria.

lysine (lî'sîn) *n*. [Gk. *lysis* loosing] A diamino-acid constituent of some plant proteins, dietary factor and cleavage product of certain animal proteins C<sub>6</sub>H<sub>12</sub>O<sub>2</sub>N<sub>2</sub>.

lysogeneals (lî'sôjén'wâs) *n*. [Gk. *lysis* loosing *genes* descent.] The action of lysine.

lysogenous,—lysogenic.

lytta (lî'tä) [Gk. *lytta* madness.] A vermiform structure of muscle fatty and connective tissue, or cartilage under the tongue of mammals lysae or rabies cantharis, blister beetle.

## M

macerate (mâs'erât) [L. *macera* to soften.] T wear way or to macerate parts of a tissue or organ to soften and wear way by digestion or other means.

machopolyp (māk špōl'ip) *n* [Gk. *machē* fight, *polys* many *pous* foot.] A nematophore of certain Hydromedusae provided with cnidoblasts or adhesive globules.  
 macrandrous (mākrān drōs) *a*. [Gk. *makros* large *aner* man.] Having large male plants or elements.  
 macranter (mākrānēr) *n* [Gk. *makros* large *aner* male] Male ant of unusually large size.  
 macroergate (mākrēr'gāt) *n* [Gk. *makros* large *ergates* worker] Worker ant of unusually large size.  
 macro—*als* see mega.  
 macrobiotic (mākrōbīōt'ik) *a*. [Gk. *makros* long *bios* life] Long lived life prolonging.  
 macroblast (mākrōblāst) *n* [Gk. *makros* large *blastos* bud.] A large cell or corpuscle a young normoblast.  
 macrocarp us (mākrōkār pōs) *a*. [Gk. *makros* large *karpos* fruit.] Producing large fruit.  
 macrocephalus (mākrōkēf'ālūs, -ēf) *a*. [Gk. *makros* large *kephē* head.] Having the cotyledons thickened big headed.  
 macrocnemic (mākrōknēm'mik) *a*. [Gk. *makros* large *cnemis* ribca.] Appl. Zoanthida having the sixth protoconeme or primary pair of mesenteries perfect.  
 macroconidium (mākrōkōnid'ium) *n* [Gk. *makros* large *konos* dust *dion dion*] A large asexual spore or conidium.  
 macroconjugant (mākrōkōnjōg'ant) *n* [Gk. *makros* large *L. conjugare* to unite.] The larger individual of conjugating pair.  
 macrocyst (mākrōkōst) *n* [Gk. *makros* large *kystis* bladder] A large reproductive cell of certain fungi a large cyst or case as for spores.  
 macrocytase (mākrōkōt'ās) *n* [Gk. *makros* large *kystis* hollow] The enzyme of macrophages or endothelial cells.  
 macrodactyl us (mākrōdāk'tilūs) *a*. [Gk. *makros* long *dactylus* finger] With long digits.

macrodont (mākrōdōnt) *a*. [Gk. *makros* large *odons* tooth] With large teeth.  
 macroevolution (mākrōēvolū'shūn) *n* [Gk. *makros* large *L. evolvere* to unroll.] Evolutionary processes extending through geological eras large-scale evolution of new genera and species owing to mutations resulting in marked changes in chromosome pattern and reaction system. Opp. microevolution.  
 macrogamete (mākrōgāmēt') *n* [Gk. *makros* large; *gamos* spouse.] The larger of two conjugants, usually considered as equivalent to ovum or female conjugant.  
 macrogametocyte (mākrōgāmēt'ōt'ē) *n*. [Gk. *makros* large *gamos* spouse *kystis* hollow] The mother-cell of a macrogamete considered female term used mainly in connection with Protista.  
 macrogamy (mākrōgām'i) *n*. [Gk. *makros* large *gamos* marriage.] Syngamy between of grown individuals of a species as in Actinophrys hologamy.  
 macroglia (mākrōglī'ā) *n* *plu*. [Gk. *makros* large *glia* glue] Astrocytes or true neuroglia astroglia and oligodendroglia.  
 macroglossat (mākrōglōs'āt) *a*. [Gk. *makros* large *glossa*, tongue.] Furnished with large tongue.  
 macrognathic (mākrōgnāth'ik) *a*. [Gk. *makros* large *gnathos* jaw] Having specially developed jaws.  
 macrogonidium (mākrōgōnid'ium) *n* [Gk. *makros* large *gonis* generation *dion dion*] A large gonidium.  
 megacyn (mākrōkōt'ē) *n*. [Gk. *makros* large *gynis* woman] Female ant of unusually large size.  
 macrole cocyte (mākrōlē'kōst, -lō-) *n* [Gk. *makros* large; *kystis* white *kystis* hollow] A chromophil leucocyte, developed from a proleucocyte.  
 macromere (mākrōmēr) *n* [Gk. *makros* large *meros* part] 1 cleavage of telolecithal eggs larger cell of lower hemisphere

**macromerizoid** (māk'rōmērōid'iz) *n.* [Gk. *makros* large *meros* part *some* animal.] One of many divisions produced by macrochizont stage of Sporozoa.

**macromesenteric** (māk'rōmēs entērī mēz) *n.* [Gk. *makros* large *meros* middle *enteron* gut.] One of the larger complete mesenteries of Anthozoa.

**macr mitosome** (māk'rōmī'tōsōm) [Gk. *makros* large *mitos* thread *some*, body] The paranucleus as in Lepidoptera.

**macromutation** (māk'rōmūtā'shōn) *n.* [Gk. *makros* large *L. meteo* to change.] Simultaneous in tabon of number of different characters.

**macromyelon** (māk'rōmī'elōn) *n.* [Gk. *makros* long *myelos* marrow] The medulla oblongata.

**macr notal** (māk'rōnō'tāl) *n.* [Gk. *makros* large *noton* back.] With large thorax, as queen ant.

**macroot** (māk'rōm) *n.* [Gk. *makros* large *on* being] The larger of two sets of cells formed after schizogony in Neosporidia the macroot giving rise to megagametes.

**macron leucocyte** (māk'rōnō'klōsēt) *n.* [Gk. *makros* larg *L. nucleus* kernel Gk. *hyles* hollow] A leucocyte having relatively large nucleus chromophli leucocyte of insects.

**macronucleus** (māk'rōnō'klōtōs) *n.* [Gk. *makros* large *L. nucleus* kernel.] The larger of two nuclei in cell usually supposed to be of vegetative or somatic nature meganucleus.

**macrophag** (māk'rōf'ag) *n.* [Gk. *makros* large *phagōn* to eat.] A large phagocytic cell, fixed wandering large mononuclear leucocyte histocyte, clasmato-cyte, pericyte, etc.

**macrophagous** (māk'rōf'agōs) *n.* [Gk. *makros* large *phagōn*, to eat.] Feeding on relatively large masses of food *opp* microphagous.

**macr phyllous** (māk'rōf'as) [Gk. *makros* large *phyllon* leaf] H ving large leaves or leaflets.

**macropodous** (māk'rōp'ōdōs) [Gk. *makros* long *podus* foot.] Having a long stalk as leaf leaflet having hypocotyl large in proportion to rest of embryo long-footed.

**macropterous** (māk'rōp'tērōs) *n.* [Gk. *makros* large *pteron* wing] With unusually large fins or wings fully winged, *opp* brachypterous.

**macropteris** (māk'rōp'tērī's) *n.* [Gk. *makros* large *pteron* fruit stone.] With nuclei markedly larger than average for the species or other group. *n.* A macropteric individual.

**macrochizogony** (māk'rōk'hīzōg'ōn) *n.* [Gk. *makros* large *chizōn* to cleave *some* generation.] Method of multiplication of macrochizonts schizogony giving rise to large merozoites.

**macrochizont** (māk'rōk'hīzōm) *n.* [Gk. *makros* large *schizōn* to cleave *on* being] Stage in life-cycle of certain Haemosporidia developed from sporozoite and giving rise to macromerozoites.

**macroclereids** (māk'rōklērē'idz) *pl.* [Gk. *makros* large *skleros* hard *meros* form.] Relatively large columnar sclereids as in coat of certain seeds.

**macroscopi** (māk'rōskōp'ik) *n.* [Gk. *makros* large *skopos* to view] Visible by the naked eye.

**macrosepalous** (māk'rōsēp'ālūs) *n.* [Gk. *makros* large *L. sepal* sepal.] With specially large sepals.

**macroseptum** (māk'rōsēp'tūm) *n.* [Gk. *makros* large *L. septon* inclosure.] A primary or perfect septum of Anthozoa.

**macrosephon** (māk'rōsēfōn) *n.* [Gk. *makros* large *siphon* tube.] Large internal siphon of certain cephalopoda.

**macrosmatic** (māk'rōsmāt'ik) *n.* [Gk. *makros* large *smell* smell.] With well-developed sense of smell.

**macrosmatous** (māk'rōsē mātūs) *n.* [Gk. *makros* large *some*, body] Possessing abnormally large body

- macroson** (māk rōsōm) *n* [Gk. *makros* large *sonē* body] A large alveolar sphere or granule in protoplasm.
- macroplanchnic** (māk'rōsplāngk nīk) *a*. [Gk. *makros* large *planchnos* cutrual.] Large-bodied and short legged.
- macrosporangiphore** (māk rōspōr ān'jōfō) *n* [Gk. *makros* large *sporas* seed *anggeion* vessel *phoros* to bear] A structure bearing a macrosporangium.
- macrosporangium** (māk'rōspōrān jīōm) *n*. [Gk. *makros* large *sporas* seed *anggeion*, vessel.] A sporangium developing macrospores or megasporos.
- macrospore** (māk'rōspōr) *n* [Gk. *makros* large *sporas* seed.] A large anisospore or gamete of Sarcodina a larger spore of heterosporous plants embryo-sac megaspore
- macrosporophore** (māk'rōspōrōfō) *n*. [Gk. *makros* large *spōr* seed *phoros* to bear] A leafy lobe developing macrosporangia.
- macrosporophyll** (māk'rōspō'rōfīl) *n*. [Gk. *makros* large *spōras* seed *phyllos* leaf] Macrosporophore carpel.
- macrosporozoite** (māk rōspō'rōzō'it) *n*. [Gk. *makros* large *spōras* seed *zoōn* animal] A larger endogamous sporozoite of Sporozoa
- macrostomatous** (māk'rōstōm ātōs) *a*. [Gk. *makros* large *stoma* mouth.] With very large mouth.
- macrostylospor** (māk rōstī'lospō) *n*. [Gk. *makros* large *stylos* pillar *spōras* seed.] A large pore-like stalked body
- macrostylous** (māk rōstī'lūs) *a*. [Gk. *makros* long *stylos* pillar] With long styles.
- macrotherm** (māk'rōthērm) *n*. [Gk. *makros* large *thermos* heat.] A tropical plant macrothermophyta megatherm.
- macrotonus** (māk'rō'tūs) *n* [Gk. *makros* large *tonos* in ex] With large can.
- macrotrichia** (māk'rōtrīk'ia) *n* *plu* [Gk. *makros* large *trichis* hair] The larger setae on body or wings of insects.
- macrotype** (māk'rōtīp) *n* [Gk. *makros* large *typos* type.] A modified arrangement of mesenteries containing more macromesenteries than normal microtype in Anthozoa.
- macrozoogonidium** (māk'rōzō'gōnīdīūm) *n*. [Gk. *makros* large *zoōn* animal *gonis* generation *idion* dim] A large zoogonidium.
- macrozoospore** (māk'rōzō'zōpōr) *n*. [Gk. *makros* large *zoōn* animal *spōras* seed.] Large motile spore.
- macruric** (māk'rōr'īk) *a*. [Gk. *makros* long *ouris* tail.] Long tailed macrurial macrurous.
- macula** (māk ūlā) *n* [L. *macula* spot.] A spot or patch of colour small pit or depression tubercle.
- macula cribrosa**,—area on wall of vestibul of ear perforated for passage of auditory nerve filaments.
- macula germinativa**,—the germinal spot nucleolus of an ovum.
- macula lutea**—yellow spot of retina, an oval yellowish area in centre of posterior part of retina at point of most perfect vision.
- macula** (māk ūlār) [L. *macula*, spot] *Peri* macula *peri* macula lutea.
- maculat** (māk ūlīt) maculiferous (māk ūlīf'ērās) maculose (māk ūlōs) *a* [L. *macula* spot.] Spotted.
- maculation** (māk'ūlā shūn) *n*. [L. *maculatus* to spot] The arrangement of spots on plant or animal.
- madrepore** (mād rēpōr) *n*. [F. *madrepore*—from L. *mater* mother Gk. *poros* friable stone] A branching stony coral plate at external opening of stone canal in echinoderms.
- madriporic** (mād tīpōr'īk) *n* [F. *madripore* madreporic.] *Peri* madreporic or madreporic *apophysis* body plate tubercle canal.
- madriporic canal**—stone canal *g.s.*

**madre porite** (mădrəp rīt) *n*. [F. *madrépore* madreporite.] A flat circular or pentagonal grooved perforated plate at end of an interambulacral area, or between two such areas in Echinoides, or between rays in Asteroidea. a modified genital plate.

**Magenie foramen** [F. *Magenie* French physiologist]. Median peritreme in roof of fourth ventricle, connecting the latter with subarachnoid cavity.

**maggot** (măg'ət) *n*. [M.E. *mæges* grub.] The worm-like insect larva, without appendages or distinct head, as that of the blow-fly.

**malacia**, —malacic, *q v*

**mala** (mă'la) *n*. [L. *mala*, cheek.] Part of maxilla of some insects, of mandible of certain myriapods. part of exterior of lower jaw of birds. cheek. malar bone.

**malacoid** (mă'la'koid) *a*. [Gk. *mala-* soft *akos* form.] Soft in texture.

**malacology** (mă'la'kō'lojī) *n*. [Gk. *mala-* soft *logos* discourse.] The study of molluscs.

**malacophilous** (mă'la'kō'fīlūs) *a*. [Gk. *mala-* soft *philo* to love.] Pollinated by agency of gastropods.

**malacopterous** (mă'la'kōp'tērūs) *a*. [Gk. *mala-* soft *pteron* wing.] Soft finned.

**malacostracous** (mă'la'kōs tră'kōs) *a*. [Gk. *mala-* soft *ostrakon* shell.] Soft-shelled.

**malar** (mă'lar) *a*. [L. *mala*, cheek bone.] Pert. or in region of cheek. *n*. The jugal or zygomatic bone.

**malaxation** (mă'la'ksh'ăn) *n*. [Gk. *mala-* to soften.] Compression of mandibles, or chewing as by wasps.

**mal** (mă) *a*. [L. *mas* male.] Pert. masculine organism. *appl*. organs of reproduction, as testes or stamens. symbol ♂

**mal pro uci us**, —nucleus of spermatozoon.

**malleus** (mă'lēus) *a*. [L. *malleus* hammer.] Hammer-shaped. *appl*. type of trophi of rotifer gizzard.

**mall of cudal** (mă'lē'kū dāl) *a*. [L. *malleus* hammer *locus* an il.]

*Pert.* malleus and locus of ear. **malleolar** (mă'lē'olār) *n*. [L. *dim* of *malleus* hammer.] The vestigial fibula of ruminants. *a. Pert.* or in region of malleolus. *appl*. arteries folds, sulcus.

**malleolus** (mă'lē'olūs) *n*. [L. *dim* of *malleus* hammer.] Medial and lateral malleolus lower extremity prolongations of tibia and fibula respectively one of the club- or racket-shaped ppendages on basal segments of hind legs of Solpogidae.

**malleoramus** (mă'lē'rāmūs) *a*. [L. *malleus* hammer *ramus* branch.] *Appl*. type of trophi with looped man brium and toothed locus rotifer gizzard.

**malleus** (mă'lē'ūs) *n*. [L. *malleus* hammer.] A part of rotifer mass tax or gizzard one of the chain of dihyr ossicles of mammals one of the Weberian ossicles of fishes.

**mallochori** *n*. (mă'lō'kōr'ion) *n*. [Gk. *mallas* wool *chorion* skin.] The primitive mammalian chorion.

**malloplacenta** (mă'lō'plă'stēn tā) *n*. [Gk. *mallas* wool L. *placenta* flat cak.] Non-deciduate placenta with villi evenly distributed as in cetaceans and some ungulates.

**Malpighian** (mălpig'ian) *n*. [M. *Malpighi* Italian anatomist.] Discovered by or named after Malpighi.

**Malpighian body or corpuscle**, —in spleen, nodular mass of lymphoid tissue ensheathing the smaller arteries in kidney glomerulus of convoluted capillary blood-vessels enclosed in dilatation of uriniferous tubule.

**Malpighian layer** —basal layer of epidermis next to true skin. ret. Malpighi.

**Malpighian tubule**, —thread-like excretory tubes leading into posterior part of gut of insects.

**maltase** (mă'l'tās) *n*. [A.S. *manit* malt.] An enzyme which converts malt-sugar into grapo-sugar.



**maltose** (mól'tōs) *n.* [A.S. *maelt* malt.] Malt-sugar formed from starch by ptyalin and amylase  $C_{12}H_{22}O_{11}$

**mamelon** (mām'elōn) *n.* [F. *mamelon* from L. *mandibula* lipple.] Small pimple-like structure in centre of tubercle of echinoid interambulacral plate papilla forming nuchellus in cycads.

**mamilla** (mām'il'ā) *n.* [L. *mamilla*, nipple.] A nipple nipple-shaped structure mammilla

**mamillary bodies**,—*corpora mamillaria* o *albucantia* *q.s.*

**mamillary process** or *tubercle*—superior tubercle connected with transverse process of lower thoracic vertebrae.

**mamillate** (mām'il'āt) *a.* [L. *mamilla*, nipple.] Studded with small protuberances

**mamma** (mām'ā) *n.* [L. *mamma* breast.] Milk secreting organ of female mammal.

**mammal** (mām'āl) *n.* [L. *mamma* breast.] An animal of class of vertebrates of which the females suckle the young

**mammalogy** (mām'āl'ōj) *n.* [L. *mamma* breast Gk. *logos* discourse.] The study of mammals.

**mammary** (mām'ārī) [L. *mamma* breast.] Pert. the breast *appl.* arteries, veins glands, tubules etc

**mammiferous** (mām'if'ēros) *a.* [L. *mamma* breast *ferre* to bear.] Developing mammae milk-secreting mammalian

**mammilla**,—*mamilla*, *q.s.*

**mammogeni** (mām'ōjēn'ik) *n.* [L. *mamma*, breast Gk. *genesis* to produce] *Appl.* pituitary hormone complex which promotes growth of the lobe-alveolar and duct systems of the mammary gland.

**manchette** (mānshē't) *n.* [F. *manchette* cuff] Membrane enveloping the cytoplasm surrounding the axial filament of a spermatid

**mandible** (mān'dibl) *n.* [L. *mandibulum* jaw] The lower jaw of vertebrates, either a single bone or composed of several paired

mouth appendage of arthropods mandibulum.

**mandibular** (māndib'ulār) *a.* [L. *mandibulum* jaw] Pert. the lower jaw *appl.* arch canal foramen, fovea, nerve notch

**mandibulat** (māndib'ulāt) *a.* [L. *mandibulum* jaw] Having a lower jaw having functional jaws having mandibles.

**mandibuliform** (māndib'ulb'ōrm) *a.* [L. *mandibulum*, jaw *forma* shape] Resembling or used as a mandible *appl.* certain insect maxillae.

**mandibulohyoid** (māndib'ulb'ōid) *a.* [L. *mandibulum* jaw Gk. *hyoides* Y-shaped.] In region of mandible and hyoid.

**mandibulomaxillary** (māndib'ulb'ōm'ikāl'ārī) [L. *mandibulum* jaw *maxilla* jaw] Pert. maxillae and mandibles of arthropods.

**manducation** (mān'dūk'āsh'ōn) *n.* [L. *manducare* to chew] Chewing mastication

**manicote** (mān'tidit) *a.* [L. *manica* sleeve] Covered with entangled hairs or matted scales.

**manna** (mān'ā) *n.* [Gk. *manna*, manna.] Hardened exudation of bark of certain trees honey-dew secreted by certain Coccidae.

**mannose** (mān'ōs) *n.* [Gk. *manna* manna.] A sugar of various plants  $C_6H_{12}O_6$

**manoxyllic** (mān'ōz'lik) [Gk. *manes* slack *xylos* wood.] Having soft loose wood as Cycadales *Opp.* pycnoxyllic.

**mantle** (mān'tl) *n.* [L. *mantellum* cloak] Outer soft fold of integument next shell of molluscs; pallium sheath of spongioblast cells body wall of ascidians scapular and wing covers of birds *ocrea*, *q.s.*

**mantle cavity**—a space between the mantle and body proper

**mantle cell**,—a cell of tapetum or overlying tissue of sporangium.

**mantle fibres**,—the spindle-fibres of a fully formed paddle

ma ti lay —a layer of embryonic medulla spinalis representing the future gray columns.

mantl | bes.,—dorsal and ventral flaps of mantle in bivalves.

manual (mān ōāl) *n.* [*L. manus* hand.] A wing-quill borne on manus of birds *remex primarius*, primary feather

manubrial (mānū'brīāl) *a.* [*L. manubrium* handle.] *Part.* a manubrium handle-shaped.

man bri m (mānū'brīūm) *n.* [*L. manubrium*, handle.] A cell projecting inwards from shield of an anthridial globe of thallophytes  
hypostome or conical elevation at distal end of hydroscon polyp clapper-like portion hanging down from under surface of medusae handle-like part of malleus of ear handle of malleus of moustache preternum or anterior part of stemum.

manus (mān ūs) *n.* [*L. manus* hand.] Hand, or part of fore-limb corresponding to it as found in vertebrates from Amphibia onwards.

manypiles,—omænum or pealterium, third chamber of stomach of ruminants—so-called from its folded structure.

marcescent (mār'sēnt) *a.* [*L. marcesco* to wither.] Withering but not falling off *appl.* calyx or corolla persisting after fertilization.

marginal (mār'juāl) *a.* [*L. margin* edge.] *Part.* at or near the margin, edge or border; *appl.* form of narration *appl.* convulsion of frontal lobe *appl.* type of placenta *appl.* plates round margin of chelonian carapace

marginalia (mār'juāl'īā) *plu.* [*L. margin* edge.] Prostalia or defensive spicules on body surface round oeculum.

marginate (mār'jināt) *a.* [*L. margin* edge.] Having distinct margin in structure or colouring

marginicidal (mār'jinīdāl) *a.* [*L. margin* edge *caedo* to cut.] Debilicating by line of union of carapels

marginiform (mār'jinifōrm) *a.* [*L. margin* edge *forma* shape.] Like a margin or border in appearance or structure.

marginirostral (mār'jinrō'strāl) *a.* [*L. margin* edge *rostrum* beak.] Forming the edges of bird's bill.

marita (mār'tīā, mār'tīā) *n.* [*L. maritus* conjugal.] Sexually mature stage in helminth life history

marital (mār'tīāl) *a.* [*L. maritus* conjugal.] *Part.* marita producing fertilised eggs, *appl.* trematodes.

marker—an identifying factor a gene of known location and effect which makes possible the determination of the distribution of other less conspicuously effective, genes.

marionate (mār'mōnāt) [*L. marmor* marble.] Of marbled appearance.

marrow (mār'ū) *n.* [*A.S. mearg* pith.] Connective tissue filling up cylindrical cavities in bodies of long bones, and spaces of cancellous tissue, differing in composition in different bones medulla osium pith of certain plants vegetable marrow

marsupial (mār'sū pīāl) *a.* [*L. marsupium*, pouch.] *Part.* marsupium pouch-bearing as kangaroo *appl.* bones of pelvic girdle in certain mammals.

marsupium (mār'sū pīūm) *n.* [*L. marsupium* pouch.] Any pouch-like structure in which the young of an animal complete their development, such as abdominal pouch of marsupials gill cavities of bivalves recess formed by diverging spaces and supporting membrane in stelleroids structure protecting the acrocyt in Sertularia nursing-sac surrounding certain archegonia.

mask (māsk) *n.* [*F. masque* mask.] A hinged prehensile structure corresponding to adult labium peculiar to dragon-fly nymph.

masked (māsk'd) *a.* [*F. masque* mask.] Personate, *appl.* corolla concealed, *appl.* fat of cell which is not evident microscopically

massa intermedia,—grey matter connecting thalami across third ventricle middle commissure.

masseter (mäs'tēr) *n* [Gk. *masseter* one that chews.] Muscle which raises lower jaw and assists in chewing

masseteric (mäs'tēr'ik) *a*. [Gk. *masseter* one that chews.] *Peri* or near masseter muscle of cheek *appl* artery vein nerve.

massive (mäs'iv) *a*. [L. *massa* mass.] Bulky heavy compacted *appl* nuclei deficient in nuclear sap.

massula (mäs'ülä) *n*. [L. *massula* small mass.] A mass of microspores in a sporangium of certain pteridophytes massed group of microspores in orchids.

mast cells,—spheroid or ovoid cells of very granular protoplasm numerous i connective tissue where fat is being laid down Mastzellen of Ehrlich.

mastax (mäs'täks) *n* [Gk. *mastax* jaws.] The gizzard or pharyngeal mill of rotifers.

mastication (mäs'tikähshn) *n* [L. *masticare* to chew] Process of chewing food with teeth till reduced to small pieces or to a pulp.

masticatory stomach,—the gastric mill or stomodaeal apparatus of crustaceans for grinding and straining food material.

masclion (mäs'tö'sh) *n*. [Gk. *masclion* breast *salient dim.*] Nipple-like protuberance on parson in some spiders.

mastigium (mäs'tij'üm) *n*. [Gk. *mastigon* little whip.] Defensive posterior lash of certain larvae.

mastigobranchia (mäs'tigöb'äng'klä) *n* [Gk. *mastix* whip *branchia*, gills.] Epipodite i adult Decapoda, bilobed membranous lamina extending upwards between gills.

mastigosom (mäs'tigösöm') *n*. [Gk. *mastix* whip *soma* body] A blepharoplast.

mastoid (mäs'toid) *a*. [Gk. *mastos* breast *eidos* form.] Nipple-shaped *appl* a process of temporal

bone cells, foramen, fovea notch

mastoidesquamous (mäs'toid'ö-skwä'mös) *a*. [Gk. *mastos* breast *eidos* like L. *squama* scale.] *Peri* mastoid and squamous parts of temporal bone.

mastoidohumeralis (mäs'toid'öb'il mēr'äl's) *a* [Gk. *mastos* breast *eidos* like L. *humerus* humerus] A muscle of certain quadrupeds connecting mastoid and humerus.

masto-occipital (mäs'tö-ökip'äl) *a*. [Gk. *mastos* breast; L. *occiput* occiput.] *Peri* occipital bone and mastoid process of temporal.

mastoparietal (mäs'töpar'etäl) *a*. [Gk. *mastos* breast L. *paries* wall.] *Peri* parietal bone and mastoid process of temporal.

mastotympani (mäs'tötimpän'ik) *a*. [Gk. *mastos* breast *tympanon* drum.] *Appl* part of tympanic cavity boundary in certain reptiles.

mating types,—groups, the individuals of which do not conjugate with individuals of other groups, as of ciliates.

matriclinous (mät'riklin' ös) *a*. [L. *mater* mother Gk. *klina* to bend] With hereditary characteristics more maternal than paternal microclimic matriclinal.

matrix (mät'ris) *n* [L. *mater* mother] Ground substance of connective tissue part beneath body and root of nail uterus body upon which lichen or fungus grows envelope f chromatid.

matroclinal,—matriclinous, *see*

mattula (mät'ülä) *n* [L. *mattula*, mat.] Fibrous network covering petiole bases f palms.

maturation (mät'ürä'shün) [L. *maurus* ripe] Ripening completion of germ-cell development consisting i reduction of chromatin meiosis reduction of chromosomes from somatic or diploid to genetic or haploid number

Mauthner's cells [L. *Alexander* Austrian physician]. A layer be-

tween medullary sheath and neurolemma of nerve fibre.

**maxilla** (máksl'á) *n.* [*L. maxilla, jaw*] The upper jaw part of upper jaw behind premaxilla; an appendage of most arthropods posterior to mandible modified in various ways in adaptation to function and requirements.

**maxillary** (máksl'ári) *a.* [*L. maxilla, jaw*] *Part.* or *i.* region of maxilla or upper jaw *appl.* artery, nerve, process, sinus, tuberosity, vein, etc.

**maxillary glands**, — paired renal organs opening at base of maxilla in Crustacea.

**maxilliferous** (máksl'íf'érts) *a.* [*L. maxilla, jaw ferre* to carry] Bearing maxillae.

**maxilliform** (máksl'íf'orm) *a.* [*L. maxilla, jaw forma, shape.*] Like a maxilla.

**maxilliped** (máksl'ípéd) *n.* [*L. maxilla, jaw pes* foot.] An appendage, in one, two, or three pairs, posterior to maxillae in arthropods also maxilliped.

**maxillo-dental** (máksl'ódén'tál) *a.* [*L. maxilla, jaw dens* tooth.] *Part.* jaws and teeth.

**maxillo-jugal** (máksl'ójoo gál) *a.* [*L. maxilla, jugum* yoke.] *Part.* jaw and jugal bone.

**maxillo-labial** (máksl'ólá'bál) *a.* [*L. maxilla, jaw labium* lip.] *Part.* maxilla and labium *appl.* dart in ticks.

**maxilli-mandibular** (máksl'ómln-díb'ulár) *a.* [*L. maxilla, jaw mandibula, jaw*] *Appl.* arch forming jaws of primitive fishes *part.* maxilla and mandible.

**maxillo-palatal** (máksl'ópál'tál) *a.* [*L. maxilla, jaw palatus* palate.] *Part.* jaw and palatal bones *appl.* maxillary process of birds.

**maxillo-pharyngeal** (máksl'ófárin-jál) *a.* [*L. maxilla, jaw Gk. pharynx* gullet.] *Part.* lower jaw and pharynx.

**maxillo-premaxillary** (máksl'óp'rémáksl'ári) *a.* [*L. maxilla, jaw*

*pre* before.] *Part.* whol. of upper jaw *appl.* jaw when maxilla and premaxilla are fused.

**maxilloturbinal** (máksl'ótúr'bínál) *a.* [*L. maxilla, turbo* whirl.] *Part.* maxilla and turbinals. *n.* A bone arising from lateral wall of nasal cavity which supports sensory epithelium.

**maxillula** (máksl'ólá) *n.* [*L. dim. of maxilla, w*] A first maxilla in Crustacea when there are more pairs than one an appendage between mandible and first maxilla in primitive insects.

**meic** (má'ík) *a.* [*Gk. meikos* cake.] Placental *part.* placenta.

**M-chr** mesosome, — microchromosome or mediocentric chromosome.

**M-disc**, — a line in middle of Henem line, *q v*

**meatus** (má'tús) *n.* [*L. meatus* passage.] A passage or channel as acoustic nasal etc.

**mechanism** (mék'ántrú) *n.* [*Gk. mekhané* machine.] The view that all vital phenomena are due to physical and chemical laws.

**mechanocyte** (mék'ánoít) *n.* [*Gk. mekhané* contrivance *kytos* hollow.] A cell derived from bone, cartilage, connective tissue, tendon, or muscle supporting cell fibrocyte.

**mechanoreceptor** (mék'ánbrétsóp'tór) *n.* [*Gk. mekhané* contrivance *L. recipere* to receive.] A specialized structure sensitive to contact pressure, gravity.

**Meckel cartilage** or *od* [*J. F. Meckel, junior* German anatomist]. The lower jaw of lower vertebrates, and in higher vertebrates, the axis round which membrane bones of jaw are arranged and formed.

**Meckel ganglion** [*J. F. Meckel, junior* German anatomist]. The sphenopalatine ganglion.

**meconidium** (mék'óníd'íum) *n.* [*Gk. mekon, poppy idion* dim.] Sessile or pedicellate extracapsular medusa usually lying on top of gonangium of certain hydrozoa.

- meconium** (mēkō ūm) *n* [Gk. *mecon* poppy] Wast products of pupa other embryonic form contents of intestine of new-born mammal.
- media** (mēdīa) *n* [L. *medius* middle] A middle structure such as a layer of tissue central nervous *ply* f medium, substances of various kinds in which cultures are grown transmitting substances.
- medial** (mēdīd) *adv* [L. *medius* middle *ad* to.] Towards but not quite in the middle line or axis.
- medial** (mēdīl) *a* [L. *medius* middle.] Situated in the middle.
- median** (mēdīān) *a* [L. *medius* middle.] Lying *n* running in axial plane intermediate middle. *n* The middle variat when variates re arranged in order f magnitude.
- mediastinal** (mēdīastīnāl) *a*. [L. *mediastinus* servant.] *Part* o in region of mediastinum *appl* cavity arteries, glands, pleura.
- mediastinum** (mēdīastīnūm) *n* [L. *mediastinus* servant.] Space between right and left pleura *m* and near median sagittal thoracic plane incomplete vertical septum of testis Highmore bed
- mediator** (mēdītor) *n* [L. *medius* middle] A nerve cell maintaining relation between recepto and effector
- mediocentric** (mēdīōēntrīk) *a*. [L. *medius* middle *centrum* centre] Having a medial or mediad centromere *appl* chromosome.
- mediodorsal** (mēdīōdō sāl) *a*. [L. *medius* middle *dorsum* back.] f the dorsal middle line.
- medipalatin** (mēdīpālītīn) [L. *medius* middle *palatus* palate.] Between palatal bones *appl* cranial bone of some birds
- medipectoral** (mēdīpēktōrāl) *a*. [L. *medius* middle *pectus* breast] *Appl* middle part of sternum.
- mediotapedial** (mēdīōtēpēdīāl) *n*. [L. *medius* middle *stapes* stirrup.] *Part* that portion of col mella surrs external to stapes.
- metatarsal** (mēdīōtār'sāl) *a* [L. *medius* middle *hoxa* ankle] Between tarsal bones.
- medioventral** (mēdīōbrēntrāl) *a*. [L. *medius* middle *venter* belly] f the middle ventral line.
- mediproboscis** (mēdīprōbōs'is) *n*. [L. *medi* middle; Gk. *proboscis* trunk.] Middle portion of insect proboscis, part of ligula.
- medithorax** (mēdīthōrāks) *n*. [L. *medius* middle Gk. *thorax* breast.] The middle part of thorax the mesothorax of insects.
- medium** (mēdīūm) *n*. [L. *medium* middle.] Any of the structures through which force acts, *m* refracting media of eyeball substance in which cultures are reared or tissues propagated.
- medulla** (mēdūl'a) *n* [L. *medulla* marrow pith] Marrow of bones central part of an organ or tissue pith central portion of stem.
- medulla oblongata**, — posterior portion f brain continuous with medulla spinalis or spinal cord.
- medullary** (mēdūl'ārī) *a*. [L. *medulla*, pith.] *Part* or i region of medulla *appl* axis, artery lamina membrane bone spaces canal etc.
- medullary canal**, — hollow cylindrical portion of long bone containing marrow th neurocoel neural tube.
- medullary groove**, — a groove on surface of medullary plate bounded by folds which grow and coalesce converting groove into a canal the neurocoel.
- medullary keel**, — a downward growth towards archenteron, the rudiment of central nervous system in development of certain primitive vertebrates.
- medullary layer** — a thick sub-cortical layer of the thallus of some lichens.
- medullary phloem**, — internal phloem in bicollateral bundle *m* in Cucurbitaceae
- medullary plate** — plate-like formation of ectoderm cells bordering blastopore of early embryo neural

plate, earliest rudiment of nervous system.

m dullary rays—a number of strands of connective tissue extending between pith and pericycle.

medullary sheath,—a ring of protoplasm round pith of certain stems layer of white substance, composed of myelin, surrounding axis cylinder of medullated nerve-fibre.

medullary valve,—valve of Venus, *q.v.*

medullated (méd'ülätéd) *a.* [*L. medulla*, pith.] Provided with pith, or with a medullary sheath.

medullated nerve-fibres,—fibres of brain and spinal cord consisting of axis-cylinder or neuraxons of primitive fibrillae, surrounded by medullary sheath in turn covered by delicate neurilemma.

medullispinal (médül'spínäl) *a.* [*L. medulla* pith *spina* spine.] Of the spinal cord.

medusa (médü'sä) *n.* [*Gk. Medousa*, one who rules.] A jelly-fish.

medusiform (médü'siförm) *a.* [*Gk. Medousa*, Medusa *L. forma*, shape.] Like medusa or jelly-fish.

medusoid (médü'soid) *n.* [*Gk. Medousa*, Medusa *oides* like.] A medusa like free swimming gonophore of Hydromedusa. *a.* Like jelly-fish or medusa.

medusome (médü'söm) *n.* [*Gk. Medousa* Medusa; *soma*, body] Medusoid stage in life-history of Obelia.

*m ga* —also *as* macro-  
megacephalic (még'äkëfëlik, -ëf) *a.* [*Gk. megas* large *kephale* head.] With abnormally large head having cranial capacity of over 450 c.c. *cf.* mesocephalic, microcephalic.

megagamete (még'ägämët') *n.* [*Gk. megas* large *gametes* spouse.] A rounded cell regarded as an ovum or its equivalent, developed from megagametocyte after process akin to maturation macrogamete.

megagametocyte (még'ägämët'ötsi) *n.* [*Gk. megas* large *gametes*

spouse *kytos* hollow] A cell developed from merozoite, and itself giving rise to a megagamete.

m gametocyte cells (még'ägämët'ötsi) *n.* [*Gk. megas* great *gametes* spouse *gametes* descent.] Development of megagametes or ova.

megakaryocyte (még'äkär'ötsi) *n.* [*Gk. megas* large; *karyon* nut; *kytos* hollow] An amoeboid giant cell of bone-marrow with one large annular lobulated nucleus containing number of nucleoli.

megaloesthetes (még'älësthët'ëz) *n. pl.* [*Gk. megalos* great *æsthêtes* perceiver] Sensory organs, sometimes in form of eyes, in Placophora.

megalecithal,—*see* megalecithal.

megal blast (még'älëblät) *n.* [*Gk. megalos* greatly *blastos* bud.] A primitive large erythroblast.

megalogonidium (még'älögönid'ïöm) *n.* [*Gk. megalos* greatly *gonos* offspring *lêion*, *dîon*.] A large gonidium.

m galol cithal (még'älëlë'thät) *a.* [*Gk. megalos* greatly *lêthikos* yolk.] Containing much yolk as telecithal eggs megalecithal.

m gal pt (még'älöp'tik) *a.* [*Gk. megalos* greatly *ops* eye.] Belonging to the megalopa stage.

megalopore (még'älöpör) *n.* [*Gk. megalos* great *poros* channel] Pore in dorsal plates of Clitellon, for placing megaloesthete in direct communication with exterior.

m galops (még'älöps) *n.* [*Gk. megalos* greatly *ops* eye.] A larval stage of certain Crustacea, as crabs, conspicuous by large stalked eyes megalopa.

megalospheri (még'älësfër'ik) *a.* [*Gk. megalos* greatly *sphaira* globe.] Of polythalamous foraminifer shells, having megalosphere or large initial chamber megaspheric.

megamete (még'ämët') *n.* [*Gk. megas* large *metas* part.] One of the large cells formed after primary divisions of developing ovum.

- megameric** (mĕg'āmer'ik) *n.* [Gk. *megas* large *meros* part.] With relatively large parts *opp* chromosomes with large heterochromatic regions *part* megameres.
- meganephridia** (mĕg'ānĕfrīd'ia) *n.* *pl.* [Gk. *megas* large, *nephros* kidney *idion* dim.] Large nephridia, occurring as one pair per segment holonephridia.
- megannucleus** (mĕg'ānŭ'klĕŭs) *n.* [Gk. *megas* large *L. nucleus* kernel.] The larger or vegetative nucleus of infusoria macro-nucleus trophonucleus.
- megaphaner phyt** (mĕg'āfān'ēr-ŭt) *n.* [Gk. *megas* large *phānērō* manifest *phyton* plant.] Tree exceeding 30 metres in height.
- megaphyllous** (mĕg'āfīl'ūs) *a.* [Gk. *megas* large *phyllon* leaf] Having relatively large leaves.
- megascler** (mĕg'āsklĕr) *n.* [Gk. *megas* large *skleros* hard.] Skeletal spicule of general supporting framework *f* sponges *Opp* microscleto.
- m gasome**,—macrosome, *f* *s*
- m gasorus** (mĕg'āspōr'ūs) *n.* [Gk. *megas* large *soros* heap.] A sorus containing megasporangia *opp* microsorus.
- m gasporangi m** (mĕg'āspōr'āŋ-ŭm) *n.* [Gk. *megas* large *spheros* seed *angion* vessel.] A macrospore-producing sporangi m ovule.
- megaspore** (mĕg'āspōr) *n.* [Gk. *megas* great *sphar* seed.] A larger-sized pore of dimorphic forms in reproduction by spore-*f* rination larger pore *f* heterosporous plants regarded as female gynospore embryo-sac cell of seed plant macrospore
- megasporocyte** (mĕg'āspōr'ōsīt) *n.* [Gk. *megas* large *spheros* seed *kyte* hollow.] The embryo-sac mother-cell diploid cell in ovary that undergoes meiosis, producing four haploid megaspores.
- megasporophyll** (mĕg'āspōr'ōfīl) *n.* [Gk. *megas* great *spheros* seed *phyton* leaf.] A pore bearing leaf developing megasporangia carpel.
- megatherm** (mĕg'āthĕrm) *n.* [Gk. *megas* great *therme* heat.] A tropical plant plant requiring moist heat.
- megasoid** (mĕg'āis'oid) *n.* [Gk. *megas* great *soos* animal *eidos* form.] The larger rooid resulting from binary or other fission.
- m gasospore** (mĕg'āspōr'ōs) *n.* [Gk. *megas* great *soos* animal *spheros* seed.] A large zoospore as in reproduction of certain Radiolaria a zoogonidium of certain Algae.
- megistotherm** (mĕj'istōthĕrm, mĕg) *n.* [Gk. *megistos* greatest *therme* heat.] A plant that thrives at more or less uniformly high temperature.
- Mehlis glands**,—acinous glands surrounding the ootype shell gland of trematodes.
- Melbomian glands** [*H Albinus* German anatomist]. The tarsal glands, modified sebaceous glands of the eyelids, the ducts opening on the free margins.
- melocyt** (mĕl'ōsīt) *n.* [Gk. *melos* smaller *kytes* hollow.] A reproductive cell prior to meiosis *zyte* *f*
- melogenic** (mĕl'ōjĕn'ik) *a.* [Gk. *melos* smaller *gene* descent.] Promoting nuclear division.
- melolecithal** (mĕl'ōlĕt'hal) *a.* [Gk. *melos* less *lekithos* yolk.] Having little yolk, as hololecithal and moleculal eggs.
- melomery** (mĕl'ōm'ērī) *n.* [Gk. *melos* smaller *meros* part.] Condition of having fewer than the normal number of parts.
- melophylly** (mĕl'ōfīl'ŭt) *n.* [Gk. *melos* smaller *phyton* leaf.] S pro-*el*usion of one or more leaves *a* whorl.
- miosis** (mīōsīs) *n.* [Gk. *melos* smaller.] Process of reduction division of germ-cell chromosomes from diploid to haploid number *t* maturation also meiosis.
- meiostemonous** (mĕl'ōstĕm'ōnūs) *a.* [Gk. *melos* smaller *stemon* stamen thread.] Having fewer stamens than petals or sepals.

**meiotaxy** (mē'ōtāk sī) *n* [Gk. *meiōn* smaller *taxis* arrangement.] *S* p-pression of whorl or set of organs.  
**meioli** (mē'ōl'ik) *a*. [Gk. *meiōn* smaller] *Appl* reduction division *part*. meiokinesis.

**Meissner's corpuscles** [*G Meissner* German histologist]. Tactile corpuscles, associated with sense of pain, in skin of digits, lips nipple, and certain other areas.

**Meissner's plexus**, gangliated plexus of nerve fibres in submucous coat of small intestine.

**melanin** (mēl'anin) *a*. [Gk. *melas* black.] Black or dark-brown pigment of eumelanin, pheomelanin dopa, haemorein  $C_{10}H_{10}O_2N_2S$ .

**melaniridosom** (mēl'anir'idōsēm) *n* [Gk. *melas* black; *iris* rainbow *soma*, body] *A* pigment body consisting of melanophore and associated iridocytes in corium of fishes.

**melanism** (mēl'anizm) [Gk. *melas* black.] Excessive development of black pigment.

**melanoblast** (mēl'ānōblāst) *a*. [Gk. *melas* black *blastos* bud.] *A* cell of rete mucosum giving rise to melanin formation in the Malpighian layer of epidermis.

**melanocyte** (mēl'ānōsēt) *a*. [Gk. *melas* black *kytos* hollow] *A* black pigmented lymphocyte

**melanophore** (mēl'ānōfōr) *a*. [Gk. *melas* black *phorō* to bear] *A* black pigment cell.

**melanosoma** (mēl'ānōsō mā) *a*. [Gk. *melas* black *soma* body] Dark, pigment mass associated with ocellus, as in certain Dinoflagellata.

**melanospermous** (mēl'ānōspēr mēs) *a*. [Gk. *melas* black *sperma* seed.] *Appl* seaweeds with dark coloured spores

**melanotic** (mēl'ānōt'ik) *a*. [Gk. *melas* black.] Having black pigment unusually developed.

**meliphagous** (mēl'if'āgūs) [Gk. *melis*, honey *phagō* to eat.] Feeding on honey mellivorous.

**meliferous** (mēl'if'ērūs) [L. *mel*

honey *ferre* to carry] Hoony producing

**meililug** nt (mēl'isū'jēnt) *a*. [L. *mel* honey *lugo* to suck.] Hoocy-sucking

**mellivorous** (mēl'iv'ōrūs) *a*. [L. *mel* honey *vorare* to devour] Honey eating meliphagous.

**membar** (mēm'bēr) *n* [L. *membrum* member] *A* limb or organ of the body well-defined part or organ of plant.

**membrana** (mēmbrā nā) *n* [L. *membrum* membrane.] *A* thin film skin, or layer of tissue covering part of animal or plant a thin covering of cells or of unicellular organisms a membrane.

**membraneous** (mēm'brānē shūs) *a*. [L. *membraneus* membrane.] *Of* the consistency or having the structure of a membrane.

**membran bone**—a bone developing directly in membrane without passing through cartilage stage.

**membranella** (mēm'brānēl'ā) *a*. [L. *membrana*, membrane.] *An* undulating membrane formed by fusion of rows of cilia, in some protozoa ciliated band, in tornaria.

**membraniferous** (mēm'brānif'ērūs) *a*. [L. *membrana* membrane *ferre* to carry] Enveloped in or bearing membrane

**membranoid** (mēm'brānōid) *a*. [L. *membrana* membrane Gk *eidos* form.] Resembling membrane.

**membranous** (mēm'brānūs) *a*. [L. *membrana*, membrane.] Resembling or consisting of membrane pliable and semitransparent.

**membranous cranium**,—a mesenchymal investment enclosing brain.  
**membranous labyrinth**,—internal ear separated from bony cavities by perilymph, and itself containing endolymph.

**membranous vertebral coil** *ma*,—continuous sheath of mesoderm enveloping notochord and neural tube.

**membransula** (mēmbrān sūlā) [L. *dim.* of *membrana*, membrane.] *A* concrescence of cilia, as in certain infusoria.



**membranule** (mēm'brānūl) *n.* [L. *dim* of *membrana* membrane] A small opaque space close to body of insect, in anal area of wing of some dragonflies.

**menadione**,—**vitamin K**, present in green vegetables and other foods, essential to formation of prothrombin

**menarche** (mēnār'kē) *n.* [Gk. *men*, month *arche* beginning] First menstruation age at first menstruation.

**Mendelian**,—**pert.** character which behaves according to results of Mendel law manifesting allelomorph inheritance.

**Mendelian**—a law or rule governing inheritance of characters in plants and animals, discovered by *Gregor Mendel*. This principle deals with inheritance of unit characters presence or absence of one or other of pair of contrasting characters, dominant and recessive. It also shows that offspring of organisms with a pair of contrasting characters will exhibit these in definite ratio and it is extended to deal with groups of characters.

**meningeal** (mēnīn'jēl) *a.* [Gk. *meninx* membrane.] **Pert** or in region of meninges *appl* arteries, veins, nerves etc.

**meninges** (mēnīn'jēs) *n. pl.* [Gk. *meninx* membrane.] The three membranes enclosing brain and spinal cord, from without inwards dura mater arachnoid and pia mater

**meningocyte** (mēnīn'gōst) *n.* [Gk. *meninx* membrane *kytos* hollow] A phagocytic cell of the subarachnoid space.

**meningosis** (mēn'īnggō'sis) *n.* [Gk. *meninx* membrane] Attachment by means of membranes.

**meningospinal** (mēnīn'gōspī'nāl) *a.* [Gk. *meninx* membrane L. *spina* spine.] **Pert** spinal cord membranes.

**meninx**,—**ring** of meninges.

**meniscus** (mēnī'skūs) *n.* [Gk. *meniskos* small moon.] Intercartilaginous joint exposed to violent concussion inter

vertebral disc a tactile disc, being terminal expansion of axis cylinder in tactile corpuscles.

**menopause** (mē'nōpōz) *n.* [Gk. *men* month *pausē* ending] Climatrical cessation of menstruation Cf *climacteric*.

**menotaxis** (mēn'tōk'sis) *n.* [Gk. *menain* to remain *taxis* arrangement.] Compensatory movements to maintain a given direction of body axis in relation to sensory stimuli maintenance of visual axis during locomotion.

**mensa** (mēn'sā) *n.* [L. *mensa*, table.] Chewing surface of tooth.

**menstruation** (mēn'strōō'shūn) *n.* [L. *mensis* month *struere* to flow] Periodic discharge from uterus of various vertebrates, chiefly higher mammals.

**mental** (mēn'tāl) *a.* [L. *mentum* chin.] **Pert** or i region of chin *appl* foramen nerve spines, tubercle muscle *appl* scale or plate of fish and of reptile **pert.** mentum of insects. [L. *mens* mind.] **Pert** the mind.

**mentigerous** (mēn'tī'gerūs) *a.* [L. *mentum* chin *gerere* to carry] Supporting or bearing the mentum.

**me tomochellean** (mēn'tōmēkē'llēn) [L. *mentum* chin / F *Méchi* *franc* German anatomist]. *Appl.* cartilage bone, present in few lower vertebrates, at either side of mandibular symphysis.

**mentum** (mēn'tōm) *n.* [L. *mentum* chin.] The chin rostral part of gnathochilarium in Diplopoda region of labium between prementum and bimentum in insects projection between head and foot of some gastropods

**mericarp** (mēr'ikārp) *n.* [Gk. *meros* part *karpus* fruit.] A one-seeded indehiscent part of schizocarp as of a cremocarp

**mericlinal** (mērīklī'nāl) *a.* [Gk. *meros* part *klinos* to bend] Partly periclinal *appl* chimæra with inner tissue of one species only partly surrounded by outer tissue of the other

meridional canal,—in ctenophores, canal net which adradial canals open.

meridional furrow—a longitudinal furrow extending from pole to pole of segmenting egg.

meristal (mēr'itāl) *n* [Gk. *meris* divided.] Increase in size owing to cell division of tissues.

merism, —metamerism, *q.v.*

merismatic (mēr'ismāt'ik) *a*. [Gk. *merismos* partition.] Dividing or separating into cells or segments.

meristematic, *q.v.*

merismoid (mēr'ismoid) *a*. [Gk. *merismos* partition *oides* like.] With branched plicae.

merispor (mēr'ispōr) *n*. [Gk. *meris* part *spora* seed.] A segment or spore of multicellular sporobody.

meristal (mēr'itāl) *n*. [Gk. *meris* part; *stela* pillar.] A separate part of monostelic stem passing towards from stela to leaves the branch of a stela supplying leaf.

merist m (mēr'istēm) *n*. [Gk. *meristes* divided.] Tissue formed of cells all capable of diversification, as found at growing points meristematic or meristematic tissue.

merist matl (mēr'istēmāt'ik) *a* [Gk. *meristes* divided.] Part or consisting of meristem *appl.* tissue cells f growing point meristematic.

merist matic ring—tube of meristematic tissue between cortex and pith, subtending the apical meristem and giving rise to vascular tissues.

meristi (mēr'it'ik) *a*. [Gk. *meristes* divided.] Segmented divided off into parts differing in number of parts.

meristl variation, —changes in number of parts or segments, and in geometrical relations of the parts of substantive variation.

meristogen tl (mēr'istōjēnēt'ik) *a*. [Gk. *meristes* divided *genesis* descent.] Developing from meristem.

meristhalus (mēr'isthāl'us) *n* [Gk. *meris* part *thallos* young shoot.] A stem unit an internode.

Merkel's corpuscle [F S Merkel German anatomist]. A tactile receptor in skin and in submucosa of mouth.

mermaid purse—horny floating or fixed egg-envelope of elasmobranchia.

mermithaner (mēr'mithā'ner) *n* [Gk. *mermis* cord *aner* male.] Male ant parasitised by *Mermis*.

mermithengat (mēr'mithēr'gāt) [Gk. *mermis* cord *engates* worker] An enlarged worker ant parasitised by *Mermis*.

mermithogyn (mēr'mithōj'n) *n* [Gk. *mermis* cord *gyns* female.] Female ant parasitised by *Mermis*.

meroadry (mēr'ōādri) *n* [Gk. *meris* part *adry* male.] The condition of having a reduced number of testes, as single pair in certain Oligochaeta of holandry.

meroblast (mēr'ōblāt) *n*. [Gk. *meris* part *blastos* bud.] Intermediate stage between schizont and merozoite in some Sporozoa.

meroblastic ovum.

meroblastic (mēr'ōblāt'ik) *a*. [Gk. *meris* part *blastos* bud.] *Appl.* ova which undergo only partial segmentation or cleavage in development developing from part of the oosphere only.

merocerite (mēr'ōs'ert) *n*. [Gk. *meris* thigh *keras* horn.] The fourth segment of crustacean antennae.

merocrine (mēr'ōkrin) *a*. [Gk. *meros* part *kreinō* to separate.] *Appl.* glands in which secreting cells are able to function repeatedly as endodiferous and lactiferous glands.

*Appl.* holocrine.

merocytes (mēr'ōs'its) *n. plur.* [Gk. *meros* part *kytos* hollow] Nuclei formed by repeated division of supernumerary sperm-nuclei as in egg f solichidans reptiles, and birds schizonts, *q.v.*

merogametes (mēr'ōgāmēts) *n. plur.* [Gk. *meros* part *gametes* spouse.] Protozoan individuals specialised to syngamy macrogametes. *Appl.* hologametes.

**merogamy**—**microgamy** *q.v.*  
**merogastrula** (mēr'ōgās'troolā) *n.* [Gk. *meros* part *gaster* stomach.] The gastrula formed from meroblastic ovum.  
**merogoneis** (mēr'ōjēn'ēis) *n.* [Gk. *meros* part *gonēis* descent.] Formation of parts segmentation  
**merogeny**—**merogony** *q.v.*  
**merognathite** (mērōgnā'thītē) *n.* [Gk. *meros* thigh *gnathos* jaw] Fourth segment of crustacean mouth-part.  
**merogony** (mērōg'ōn) *n.* [Gk. *meros* part *gonē* generation.] Development of normal young of small size from part of an egg in which there was no female pronucleus.  
**merolatic** (mērōlā'tik) *a.* [Gk. *meros* part *ovon* egg] *Appl.* ovariole containing nutritive or nurse cells *c/* acrotrophic polytrophic.  
**merokinesis** (mēr'okīnē'sis) *n.* [Gk. *meros* part *kinesis* movement] Formation and division of thread like chromosome in the karyomeris.  
**merome** (mērōm) *n.* [Gk. *meros* part] A body segment somite metamere.  
**meromorphosis** (mēr'omōr'fōsis) *n.* [Gk. *meros* part *morphosis* shaping] Regeneration of a part with the new part less than that lost.  
**mero** (mērōn) *n.* [Gk. *meros* upper thigh.] Posterior portion of coxa of insects sclerite between middle and hind coxae, or immediately above hind coxa, in *Diptera* mesosternum.  
**meron phridia**,—**micronephridia**.  
**merost** (mērōst') *n.* [Gk. *meros* part *on* being] A unimucate schizont-stage in Neosporidia, succeeding the planont-stage.  
**meroplankton** (mēr'ōplāng'ktōn) *n.* [Gk. *meros* part *plankton* wandering] Plankton living only part time near the surface temporary plankton consisting mainly of eggs and larvae seasonal plankton.  
**meropodite** (mēr'ōpōdīt') *meros* (mēr'ōs) *n.* [Gk. *meros* upper thigh *podē* foot.] Fourth seg-

ment of thoracic appendage in crustaceans femur in spiders.  
**merosomat** us (mēr'ōsōm'ātūs) *a.* [Gk. *meros* part *soma* body] *Appl.* anelidozooids divided into two regions, thorax and abdomen.  
**merosome** (mēr'ōsōm) *n.* [Gk. *meros* part *soma* body] A body segment, somite or metamere.  
**meroethenic** (mēr'ōsthēn'ik) *a.* [Gk. *meros* upper thigh *ethnos* strength.] With unusually developed hind-limbs.  
**merotomy** (mērōt'ōmī) *n.* [Gk. *meros* part *temno* to cut.] Segmentation or division into parts.  
**merotyp** (mēr'ōtīp) *n.* [Gk. *meros* part *typos* pattern.] Part of the same perennial plant or vegetatively propagated animal from which a holotype was taken.  
**merozoite** (mēr'ōzōīt') *n.* [Gk. *meros* part *zōon* animal.] Division product of schizont in Sporozoa.  
**merozoön** (mēr'ōzō'ōn) *n.* [Gk. *meros* part *zōon* animal] A fragment of a unicellular animal containing part of the macronucleus, obtained by artificial division.  
**merythought**,—**furcula** of birds formed by coalesced clavicles.  
**merus**,—**meropodite**, *q.v.*  
**Méry's glands** [*/ Méry* French anatomist]. B labio-urethral glands, *q.v.*  
**mesad**,—**medial**, **mesad**.  
**mesadenia** (mēsādē'nīā) *n. pl.* [Gk. *mesos* middle *adenē* gland.] Mesodermal accessory genital glands in insects *c/* ectoderm.  
**mesal**—**medial** **mesal**.  
**mesamesoboid** (mēs'amē'bōid) *a.* [Gk. *mesos* middle *amēchē* change sides form] *Appl.* ocellated cells of blood islands from which blood corpuscles are derived.  
**mesanepimeron** (mēsān'ēpīmē'rōn, mēs') *n.* [Gk. *mesos* middle *epimeron* upper thigh.] Sclerite above epimeron and below wing base, in *Diptera*.  
**mesarch** (mēs'ārk) *a.* [Gk. *meros* middle *archē* beginning] *Appl.*

xylem having metaxylem developing in all directions from the protoxylem, characteristic of ferns, having the protoxylem surrounded by metaxylem beginning in mesic environment. *appt.* *seres*.

m. enticephali (mēs'ātkēfāl'ik, -ēf) *a.* [Gk. *mesatos* mid *kephale* head.] Having a cephalic index of 75 to 80 mesocephalic.

mesaxonī (mēs'āksōn'ik) *a.* [Gk. *mesos* middle *axōn* axis.] With the line dividing the foot, passing up the middle digit.

mesotoderm (mēs'ōtk'ōdērm) [Gk. *mesos* middle *ektos* outside *dermis*, skin] Parenchyma formed of descendants of ectodermal cells which migrated inwards.

mesembryo (mēsēm'briō) *n.* [Gk. *mesos* middle *embryon* embryo.] The blastula.

mesencephalon (mēs'ānkēf'ālōn, -ēf) *n.* [Gk. *mesos* middle *en*, in *kephale* head.] The mid-brain, comprising corpora quadrigemina (bigemina) cerebral peduncles, and aqueduct of Sylvius.

mesenchyma (mēsēng'kimā) *m.* *a.* *enchyma* (mēsēng'kim) *n.* [Gk. *mesos* middle *enchyma*, to pour in.] A mass of tissue, intermediate between ectoderm and endoderm of gastrula.

mes endoderm (mēsēm dōdērm) [Gk. *mesos* middle *endon* within *dermis* skin] Cells lying posteriorly to lip of blastopore partly invaginated with endoderm in gastrulation, in development of some molluscs.

mesenterial (mēs emtēr'āl, mēs) *a.* [Gk. *mesos* middle *enteron* gut.] *Part* mesentery *appt.* filaments of Actinozoa.

mesentari (mēs'emtēr'ik) *a.* [Gk. *mesos* middle *enteron*, gut.] *Part* mesentery *appt.* arteries glands, nerve veins, etc.

mesenterial (mēs'emtēr'ik) *n.* [L. *dim* of *mesenterium* mesentery] A fold of peritoneum derived from mesentery and retains vermiform process or appendix in position.

mesenterium,--mesentery *q.v.*

mesenteron (mēsēm'tērōn mēs) *n.* [Gk. *mesos* middle *enteron* gut.] The main digestive cavity of Actinozoa and other Coelentera portion of alimentary canal lined by endoderm mid-gut.

mesentery (mēs'emtērī, mēs) *n.* [L. *mesenterium*, mesentery] A peritoneal fold serving to hold viscera in position muscular partition extending inwards from body-wall in coelenterates.

mesepimeron (mēs'ēpimērōn mēs) *n.* [Gk. *mesos* middle *epi* upon *epimeron* upper thigh.] The epimeron of insect mesothorax mesos: epimeron in Diptera.

mesepisternum (mēs'ēpistēr'nūm) *n.* [Gk. *mesos* middle *epi* upon *sternon* breast.] Meso-episternum sclerite below anterior spiracle in Diptera mesanepisternum.

m. ethmoid (mēsēth'mōid mēs) *a.* [Gk. *mesos* middle *ethmos* sieve *oides* form.] Between the two ectethmoid bones *appt.* ethmoid plate of cranium when it ossifies median cranial bone of vertebrates.

m. alad (mēs'ād) *adv.* [Gk. *mesos* middle L. *ad* to] Towards or near the middle plane.

mesial (mēs'xiāl) mesian (mēs'xiān) *a.* [Gk. *mesos* middle.] In the middle vertical or longitudinal plane.

mesial (mēs'ik, mēs'xik) *a.* [Gk. *mesos* middle] Conditioned by temperate moist climate neither xeric nor hydric.

mesoovarian,--mesovarium *q.v.*

mesobenthos (mēs'ōbēn'thōs, mēs) *n.* [Gk. *mesos* middle *benthos* depths.] Animal and plant life of sea bottom when depth is between 100 and 500 fathoms.

mesoblast (mēs'ōblāst, mēs) *n.* [Gk. *mesos* middle *blastos* bud.] The mesoderm or middle layer of an embryo mesoblastema.

mesoblastī (mēs'ōblāst'ik, mēs) *a.* [Gk. *mesos* middle *blastos* bud.] *Part* or developing from middle layer of an embryo.

**mesobranchial** (mēs obrīng'kāl mēr) *a.* [Gk. *mesos* middle *branchia* gills.] *Part* middle gill-region as in Crustacea.

**mesobronchus** (mēs obrōng'kūs mēr) *n.* [Gk. *mesos* middle *bronchos* windpipe.] In birds, the main trunk of a bronchus giving rise to secondary bronchi.

**mesoesocum** (mēs ēsē'kūm mēr) *n.* [Gk. *mesos* middle *L. caecus* blind.] The mesentery connected with the caecum.

**mesocardium** (mēs'ōkār'diŏm mēr) *n.* [Gk. *mesos* middle *kardia* heart.] An embryonic mesentery binding heart to pericardial walls part of pericardium enclosing veins (venous m.) or aorta (arterial m.).

**mesocardial ligament or gubernaculum cordis.**

**mesocarp** (mēs'ōkār'p mēr) *n.* [Gk. *mesos* middle *karpus* fruit.] The middle layer of the pericarp.

**mesocephalous** (mēs'ōsēn'trūs,mēs) *a.* [Gk. *mesos* middle *kēphalōn* centre.]

**mesocephalic** (mēs ōkē'fāl'ik mēs'ōsēf'āl'ik) *a.* [Gk. *mesos* middle *kēphalē* head.] Having a cranial capacity of between 1330 and 1450 c. cf. *megacephalic*, *macrocephalic*.

**mesochillum** (mēs ōkē'lŭm mēr) *n.* [Gk. *mesos* middle; *chēlōn* lip.] The middle portion of labellum of orchids.

**mesochiton** (mēs ōkē'tŭn mēr) *n.* [Gk. *mesos* middle *chiton* coat.] Middle layer of oegonial wall, between endochiton and exochiton, as in F. cales *mesochite*.

**mesocoel** (mēs ōkē'l mēr) *n.* [Gk. *mesos* middle *koēlos* hollow.] Middle portion of coelomic cavity the second of three main parts of coelom of molluscs cavity of menkephalon, aqueduct of Syllurus or iter.

**mesocolic** (mēs kō'l'ik mēr) *a.* [Gk. *mesos* middle *kolon* large intestine.] *Part* mesocolon *appl.* lymph glands.

**mesocolon** (mēs'ōkō'lŏn mēr) *n.*

[Gk. *mesos* middle *kolon* large intestine.] A mesentery or fold of peritoneum attaching colon to dorsal wall of abdomen.

**mesocoracoid** (mēs'ōkōr'ākoīd, mēr) *a.* [Gk. *mesos* middle *korax* crow *oides* form.] Situated between hyper and hypo-coracoid *appl.* middle part of coracoid arch of certain fishes.

**mesocotyl** (mēs'ōkōt'ŭl mēr) *n.* [Gk. *mesos* middle *kotylē* cup.] Part of axis between scutellum and colcoptile.

**mesocycle** (mēs ōsik' mēr) *n.* [Gk. *mesos* middle *kyklos* circle.] A layer of tissue between xylem and phloem of a monocotyledonous stem part of conjunctive tissue of stem.

**mesodae m** (mēs ōdē'ūm, mēr) *n.* [Gk. *mesos* middle *odaios* part way.] Endodermal part of embryonic digestive tract, between stomodaeum and proctodaeum.

**mesoderm** (mēs'ōdērm mēr) *n.* [Gk. *mesos* middle *dērmis* skin.] The mesoblast or embryonic layer lying between ectoderm and endoderm.

**mesodermal** (mēs'ōdērm'al mēr) *a.* [Gk. *mesos* middle *dērmis* skin.] *Part* derived or developing from mesoderm.

**mesode m** (mēs'ōdēūm mēr) *n.* [Gk. *mesos* middle *dēmos* bond.] Part of mesocycle.

**mesodont** (mēs'ōdōnt, mēr) *a.* [Gk. *mesos* middle *odōns* tooth.] *Appl.* stag-beetles having a medium development of mandible projection.

**mesogaster** (mēs'ōgās'tēr mēr) *n.* [Gk. *mesos* middle *gaster* stomach.]

The mesentery or fold of peritoneum supporting the stomach.

**mesogastric** (mēs'ōgās'tr'ik mēr) *a.* [Gk. *mesos* middle *gaster* stomach.] *Part* mesogaster or mesogastrium or to middle gastric region.

**mesogastrium** (mēs'ōgās'tr'ium mēr) [Gk. *mesos* middle *gaster* stomach.] Mesentery connecting stomach with dorsal abdominal wall in embryo middle abdominal region.

**mesogleia** (més'ogí'á mēx) *n* [Gk. *mesos* middle *glia* glue.] Mesodermal phagocytic interstitial cells of nervous system of Hortege microglia of Robertson oligodendroglia.

**mesoglea** (més'ogí'á, mēx) *n*. [Gk. *mesos* middle *glia*, glue.] An intermediate non-cellular gelatinous layer in sponges and coelenterates.

**mesognathion** (més'ónth'íon mēx) *n* [Gk. *mesos* middle *gnathos* jaw] The lateral segment of premaxilla, bearing lateral incisor

**mesohepar** (més'ohē'pār mēx) *n*. [Gk. *mesos* middle *hepar* liver.] Mesentery supporting liver

**mesohydrophyte** (més'ohí'drófítik, mēx) *s*. [Gk. *mesos* middle *hydro* water; *phyton* plant.] Growing in temperate regions but requiring much moisture.

**mesolecithal** (més'olēs'híal mēs) [Gk. *mesos* middle *lekithos* yolk.] Having moderate yolk content of centrolecithal.

**mesology** (més'ol'ojí, mēx) *n*. [Gk. *mesos* middle *logos* discourse.] The study of relations between organism and environment biogenics.

**mesom** (mēs'óm, mēx'óm) *n*. [Gk. *mesos* middle.] The axis regarded as morphological unit of plants.

**mesomere** (més'ómēr mēx) *n*. [Gk. *mesos* middle *meros* part] Middle zone of coelomic pouches in embryo mesoblastic acoelate protovertebra medial branch of phallic lobe in insects

**mesometrium** (més'ómē'tríúm, mēx) *n*. [Gk. *mesos* middle *metron* uterus.] The mesentery of uterus and connecting tubes.

**mesomitosis** (més'ómítōs'is, mēx) *n* [Gk. *mesos* middle *mitos* thread.] Mitosis within nuclear membrane without co-operation of cytoplasmic elements of metaphase.

**mesomorph** (més'ómōr'fik, mēx) *s*. [Gk. *mesos* middle *morphe* form.] Having form, structure, or size normal or intermediate between extremes mesoplastic.

**mesomyodian** (més'ómíō díon mēx) *s*. [Gk. *mesos* middle *mys* muscle *eidas* form.] *Appl* birds with muscles of syrinx attached to middle of bronchial semi-rings.

**meson** (mēs'ón, mē'xón) *n* [Gk. *mesos* middle.] The central plane, or region of it.

**mesonephri** (més'ónē'frik, mēx) *s*. [Gk. *mesos* middle *nephros* kidney] *Part* mesonephros, or mid kidney *appl* duct, tubules.

**mesonephridium** (més'ónē'frí'díúm mēx) *n* [Gk. *mesos* middle *nephros* kidney *lidon*, stem.] A nephridium or excretory organ of certain invertebrates derived from mesoblast.

**mesonephros** (més'ónē'róx, mēx) *n* [Gk. *mesos* middle *nephros* kidney] Intermediate part of excretory organ in vertebrate embryos Wolffian body

**meso otum** (més'ónō's'túm mēs) *n* [Gk. *mesos* middle; *noton* back.] Dorsal part of insect mesothorax.

**mesoparaptaron** (més'ópār'ápt'érón, mēx) *n*. [Gk. *mesos* middle *pteron*, beside *pteron* wing] A small sclerite of mesothorax of some insects.

**mesopetalum** (més'ópēt'álúm mēs) *n*. [Gk. *mesos* middle *petalon* leaf] Labellum or l p of an orchid.

**mesophanerophyte** (més'ófán'ēr'ítik, mēx) *n* [Gk. *mesos* middle *phaneros* manifest *phyton* plant.] Tree from 8 to 30 metres in height.

**mesophil** (mēs'ófil, mēx) *s*. [Gk. *mesos* middle *phileo*, to love.] Thriving at moderate temperatures, at between 30° and 40 C. when *appl* bacteria mesophilic mesic, *q.v* *n*. Mesophile.

**mesophloeum** (més'ófíō'ém, mēs-) *n*. [Gk. *mesos* middle *phlois* smooth bark.] Middle or green bark mesophloeum.

**mesophragma** (mēs'ófílg'mā, mēx) *n*. [Gk. *mesos* middle *phragma*, fence] A chitinous piece descending into interior of insect body with post-scutellum for base M or Hansen line, *q.v*

- mesophryon** (mēsōf'rīon mēs) *n* [Gk. *mesos* middle *ophrys* eyebrow] The elevated median head region of trilobites.
- mesophyll** (mēs'ōfil mēs) *n* [Gk. *mesos* middle *phyllon* leaf.] The internal parenchyma of a leaf.
- mesophyte** (mēs'ōfit mēs) *n* [Gk. *mesos* middle *phyton* plant.] A plant thriving in temperate climate with normal amounts of moisture.
- mesoplankton** (mēs'ōplāng'ktōn mēs) *n* [Gk. *mesos* middle *plankto* wandering.] Drifting animal and plant life from a hundred fathoms downwards drifting organisms (medium size of megaplankton, microplankton, nanoplankton).
- mesoplast** (mēs'ōplast mēs) *n* [Gk. *mesos* middle *plastos* moulded.] A cell nucleus.
- mesoplastic** (mēs'ōplās'tik, mēs) *a*. [Gk. *mesos* middle *plastos* moulded.] Having a normal or average form mesomorphic *apyl* constitutional type.
- mesoplastron** (mēs'ōplās'trōn mēs) *n* [Gk. *mesos* middle *F. plastron* breast-plate.] Plate between hyo- and hypo-plastron of certain turtles.
- mesoplerite** (mēs'ōploō'rit mēs) *n* [Gk. *mesos* middle *pleura* side.] Lateral mesothoracic sclerite as in Diptera.
- mesopleuron** (mēs'ōploō'rōn mēs) *n*. [Gk. *mesos* middle *pleura* side.] A lateral part of insect mesothorax mesopleurite.
- mesopodial** (mēs'ōpō'dīal, mēs) *a*. [Gk. *mesos* middle *podus* foot.] Part mesopodium.
- mesopodium** (mēs'ōpō'dīum mēs) *n* [Gk. *mesos* middle *podus* foot.] Leaf-stalk or petiole region of leaf middle part of molluscan foot the metacarpus or metatarsus.
- mesopraescutum** (mēs'ōprēs'kūtūm mēs) *n* [Gk. *mesos* middle *L. prae* before *scutum* shield.] Praescutum of mesothorax in insects.
- mesopterygium** (mēs'ōptēr'gīum mēs) *n* [Gk. *mesos* middle *pterygion* little wing or fin.] The middle of three basal pectoral fin-cartilages in recent elamobranchs.
- mesopterygoid** (mēs'ōptēr'goid, mēs-) *n* [Gk. *mesos* middle *pteryx* wing *oides* form.] The middle of three pterygoid bone elements of teleosts the ectopterygoid.
- mesoptile** (mēs'ōtil mēs- ptil) *n* [Gk. *mesos* middle *ptilon* feather.] Prepecta following proptile and succeeded by metaptile or by teleoptile.
- mesorchium** (mēs'ōrk'kīum mēs) *n*. [Gk. *mesos* middle *orchis* testicle.] Mesentery supporting testis.
- mesorectum** (mēs'ōrēk'tūm mēs-) *n*. [Gk. *mesos* middle *L. rectus* straight.] Mesentery supporting rectum.
- mesorhinal** (mēs'ōrī'nāl mēs) *a*. [Gk. *mesos* middle *rhis* nose.] Between nostrils.
- mesorhinium** (mēs'ōrī'n'īum mēs-) *n*. [Gk. *mesos* middle *rhis* nose.] The internal surface region of a bird's bill.
- mesosalphinx** (mēs'ōsāl'pīngks, mēs-) *n*. [Gk. *mesos* middle *salpinx* trumpet.] The portion of broad ligament enclosing uterine tube.
- mesoscapal** (mēs'ōskāp'al mēs) *n* [Gk. *mesos* middle *L. scapula* shoulder blade.] Scapular spine.
- mesoscutellum** (mēs'ōsktē'l'ūm mēs) *n* [Gk. *mesos* middle *L. scutellum* small shield.] Scutellum of insect mesothorax.
- mesoscutum** (mēs'ōskūt'ūm mēs) *n* [Gk. *mesos* middle *L. scutum* shield.] Scutum of insect mesothorax.
- mesosoma** (mēs'ōsō'mā mēs) *n*. [Gk. *mesos* middle *soma* body.] Middle part of body prothorax of Arthropoda.
- mesosome** (mēs'ōsōm mēs) *n*. [Gk. *mesos* middle *soma* body.] A phallosome.

- mesosperm** (mēs'ospērm mēs) *n*. [Gk. *mesos* middle *sperma* seed.] Integument investing uellus f ovule.
- mesospore** (mēs'ospō mēs) *n* *soporium* (mēs'ospō rīum mēs) *n*. [Gk. *mesos* middle *sporos* seed.] The intermediate of three spore coats unicellular teleutospore in certain rust fungi resting-spore stage
- mesostate** (mēs'ōstāt, mēs) *n*. [Gk. *mesos* middle *statis* standing.] Intermediate stage in metabolism.
- mesosternum** (mēs'ōstēr'stōm, mēs) *n*. [Gk. *mesos* middle *sternon* solid.] The middle layer of thecal plates f Cystodera.
- mesosternabra** (mēs'ōstēr'fbrā, mēs) *n*. [Gk. *mesos* middle *sternon* breast bone.] A part f developing mesosternum.
- mesosternum** (mēs'ōstēr'nūm, mēs) *n*. [Gk. *mesos* middle *L. sternon* breast-bone.] Middle part of sternum of vertebrates gladiolus sternum of mesothorax of insects
- mesosternal area** episternum of mesothorax, mesokatepisternum of Diptera.
- mesostethi** *m* (mēs'ōstē'thīlōm mēs) *n*. [Gk. *mesos* middle *stethos* chest] A mesosternum.
- mesostylous** (mēs'ōstī'lōs, mēs) *a*. [Gk. *mesos* middle *stylos* pillar] Having styles of intermediate length *appl.* heterostylous flowers.
- mesotarsal** (mēs'ōtār'sāl mēs) [Gk. *mesos* middle *L. tarsus* ankle joint.] *Part* mesotarsus.
- mesotarsus** (mēs'ōtār'stās, mēs) [Gk. *mesos* middle *L. tarsus* ankle-joint.] A middle-limb tarsus of insects.
- mesotergum** (mēs'ōtēr'gūm mēs) [Gk. *mesos* middle *L. tergum* back.] Median arched portion or axis of trilobite body
- mesothel** *m* (mēs'ōthē'stīlōm mēs) *n*. [Gk. *mesos* middle *thēlos* cup.] The middle investing layer f an amber-sec.
- mesotheli** *m* (mēs'ōthē'stīlōm mēs)

- n* [Gk. *mesos* middle *thel* nipple.] Mesoderm bounding primitive coelom and giving rise to muscular and connective tissue.
- mesotherm** (mēs'ōthērm mēs) *n*. [Gk. *mesos* middle *thermos* heat.] Plant thriving in moderate heat.
- mesothoraci** (mēs'ōthōrās'ik, mēs) *n*. [Gk. *mesos* middle *thorax* chest.] *Part* or in region of mesothorax *appl.* a spiracle of insects.
- mesothorax** (mēs'ōthō'rāks, mēs) *n*. [Gk. *mesos* middle; *thorax* chest.] The middle segment of thoracic region f insects.
- mesoti** (mēs'ō'tik, mēs) *a*. [Gk. *mesos* middle *otus* ear] *Appl.* paired chondrocranial cartilages f birds between parachordal and acrochordal also basiotic.
- mesotrisene** (mēs'ōtrī'ēn, mēs) *n*. [Gk. *mesos* middle *trisine*, trident.] Aberrant type of trisene pecten.
- mesotrochal** (mēs'ōtrō'kāl mēs) *a*. [Gk. *mesos* middle *trochos* wheel.] *Appl.* an annulate larva with circle of cilia round middle of body
- mesotrophic** (mēs'ōtrōf'ik mēs) *a*. [Gk. *mesos* middle *trophos* nourishment.] Mixotrophic, *g.s.* providing moderate amount of nutrition, *appl.* environment.
- mesotympani** (mēs'ōtīmpān'ik, mēs) [Gk. *mesos* middle *tympanon* drum.] Symplectic bone in suspensory apparatus f lower jaw in fishes
- mesovarium** (mēs'ōvā'rīūm, mēs) *n*. [Gk. *mesos* middle *L. ovarium*, ovary] Mesentery of ovary suspensory mesentery in fishes.
- mesov** *trai* (mēs'ōvēr'vā'il, mēs) *a*. [Gk. *mesos* middle *L. venter* belly] I middle ventral region.
- Mesozoic** (mēs'ōzō'ik, mēs) [Gk. *mesos* middle *zōo* life.] *Appl.* or *part.* secondary geological era, the age of reptiles.
- meot** *m* (mēs'ō'm) *n*. [Gk. *meotēs* filled.] A vascular bundle including hadrome and leptome.



- mesophryon** (més'ofr'ôn, mēz) *n* [Gk. *mesos* middle *ophrys* eye brow] The elevated median head region of trilobites.
- mesophyll** (més'ofil mēz) *n*. [Gk. *mesos* middle *phylon* leaf] The internal parenchyma of leaf.
- mesophyte** (més'ofil, mēz) *n*. [Gk. *meso* middle *phyton* plant.] A plant thriving in temperate climate with normal amount of moisture.
- mesoplankton** (més'oplāng'ktōn, mēz-) *n*. [Gk. *mesos* middle *planktos* wandering] Drifting animal and plant life from hundred fathoms downwards drifting organisms of medium size of megaplankton, microplankton, nanoplankton.
- mesoplast** (més'oplast, mēz) *n* [Gk. *mesos* middle *plastos* moulded.] A cell nucleus.
- mesoplastid** (més'oplast'ik mēz) *n*. [Gk. *mesos* middle *plastos* moulded.] Having a normal or average of mesomorphic *appl.* constitutional type.
- mesoplastron** (més'oplas'trōn mēz) *n*. [Gk. *mesos* middle *Plastron* breast-plate.] Flat between hyo- and hypo-plastron of certain turtles.
- mesopleurite** (més'oploo rit mēz) *n* [Gk. *mesos* middle *pleura* side] Lateral mesothoracic sclerite as in Diptera.
- mesopleuron** (més'oploo rōn mēz) *n* [Gk. *mesos* middle *pleura* side.] A lateral part of insect mesothorax mesopleurite.
- mesopodial** (més'opō'diāl mēz) *n* [Gk. *mesos* middle *podus* foot.] *For* mesopodium.
- mesopodium** (més'opō'diūm mēz) *n* [Gk. *mesos* middle *podus* foot.] Leaf-stalk or petiole region of leaf middle part of molluscan foot the metacarpus or metatarsus.
- mesopraescutum** (més'prēskū tūm mēz) *n* [Gk. *mesos* middle *L. prae* before *scutum* shield.] Praescutum of mesothorax in insects.
- mesopterygi** m (més'otērf'igēm, mēz) *n* [Gk. *mesos* middle *pterygion* little wing or fin.] The middle of three basal pectoral fin-cartilages in recent elasmobranchs.
- mesopterygoid** (més'otērf'igōid mēz) *n* [Gk. *mesos* middle *pterys* wing *oides* form.] The middle of three pterygoid bone elements of teleosts the ectopterygoid.
- mesoptile** (més'otil mēz pil) *n*. [Gk. *mesos* middle *ptilon* feather] Prepecta following proptile and succeeded by metaptile or by telopile.
- mesorchium** (més'or'kiūm mēz) *n*. [Gk. *mesos* middle *orchis* testicle.] Mesentery supporting testis.
- mesorectum** (més' rēk'tūm, mēz) *n*. [Gk. *meso* middle; *L. rectus* straight.] Mesentery supporting rectum.
- mesorhinal** (més'or'nāl, mēz) *n*. [Gk. *mesos* middle *his* nose.] Between nostrils.
- mesorhinium** (més'or'n'ium, mēz) *n*. [Gk. *mesos* middle *rhis* nose.] The internal surface region of a bird bill.
- mesosalpax** (més'sal pingis, mēz) *n*. [Gk. *mesos* middle *salpinx* trumpet.] The portion of broad ligament enclosing uterine tube.
- mesoscapula** (més'sakip'ulā, mēz) *n* [Gk. *mesos* middle *L. scapula*, shoulder blade.] Scapular spine.
- mesoscutellum** (més'sakutēl'ūm, mēz) *n* [Gk. *mesos* middle *L. scutellum* small shield.] Scutellum of insect mesothorax.
- mesoscutum** (més'sakutūm, mēz-) *n* [Gk. *mesos* middle *L. scutum* shield.] Scutum of insect mesothorax.
- mesosoma** (més'sō mē mēz-) *n*. [Gk. *mesos* middle *soma* body.] Middle part of body praecabdomen of Arthropoda.
- mesosome** (més'sōm mē) *n* [Gk. *mesos* middle *soma* body.] A phallosome *g.m*

**metacromion** (mēt'āk'rō'miōn) *n* [Gk. *metas* after *akros* summit *omion* shoulder.] Posterior branch-process of acromion-process of scapular spine.

**metacrylic** (mēt'hāk'rik) *a*. [Gk. *metas* after *akros* circle.] *Appl* final infective forms, of certain parasitic protozoa which pass on to next host.

**metadiscoidal** (mēt'ādihō'idāl) *a*. [Gk. *metas* after *diskos* disc *oides* form.] *Appl* placenta in which villi are at first scattered and later restricted to a disc, as in man and monkeys.

**metadriv** (mēt'ādrī'vōmā) *a* [Gk. *metas* after *drivōs* running.] With primary veins of segment arising from upper side of midrib.

**meta-epistern** *m*.—metepisternum *p*

**metæsthesism** (mēt'ēsthē'zīm) *n* [Gk. *metas* after *æsthesis* perceptible by senses.] Doctrine that consciousness is a product of evolution of matter and force.

**metagastric** (mēt'āgās'trik) *a* [Gk. *metas* after *gaster* stomach.] *Part* posterior gastric region.

**metagastrula** (mēt'āgās'trōolā) *n* [Gk. *metas* after *gaster* stomach.] A modified form of gastrula.

**metagensis** (mēt'āgē'nīs) *n* [Gk. *metas* after *genesis* descent.] Alternation of sexual and asexual generations of heterogenesis.

**metagony** (mēt'āgō'nī) *n* [Gk. *metas* afterwards *gonē* female.] Protandry.

**metakinesis** (mēt'ākīnē'sis) *n* [Gk. *metas* after *kinesis* to move.] Middle stage of mitosis, during which chromosomes are grouped in equatorial plane movement of chromosomes between prophase and metaphase.

**metallic** (mēt'āl'ik) *a* [Gk. *metallion* mine.] Iridescent *appl* colours due to interference by fine striae or thin lamellae as in insect.

**metaneph** (mēt'ālōf) *n* [Gk. *metas* after *nephos* crest.] The posterior

crest of molar uniling metacone metacornule and hypocone

**metamers** (mēt'āmētr) *n* [Gk. *metas* after *meros* part.] A body segment.

**metameri** (mēt'āmēr'ik) *a*. [Gk. *metas* after *meros* part.] *Part* metamerism or segmentation.

**metamerised** (mēt'āmētrīz) *a* [Gk. *metas* after *meros* part.] Segmented.

**metamerism** (mēt'āmēr'izm) *n* [Gk. *metas* after *meros* part.] The condition of a body divided up into segments more or less alike segmentation zonal symmetry

**metamitosis** (mēt'āmītō'sis) *n* [Gk. *metas* after *mitos* thread.] Mitosis in which cytoplasmic and nuclear elements are both affected of mesomitosis.

**metamorphosis** (mēt'āmōr'fōsis) *n* [Gk. *metas* change of *morphe* form.] Change of form and structure undergone by an animal from embryo to adult stage as in insects transformation of one structure into another as of stamens into petals interference with normal symmetry in flowers internal chemical change.

**metamorph** (mēt'āmōr'f) *n* *plur* [Gk. *metas* change of *morphe* form.] Different forms of same species as in certain sponges.

**metamyelocyte** (mēt'āmī'elōit) *n* [Gk. *metas* beyond *myelos* marrow *kytos* hollow.] A myelocyte with horseshoe-shaped nucleus before transformation into leukocyte.

**metanauplius** (mēt'ānōp'liūs) *n* [Gk. *metas* after *L. nauplius* kind of shell-fish.] Larval stage of Crustacea, succeeding nauplius stage.

**metandry** (mēt'āndrī) *n* [Gk. *metas* after *andros* male.] Microandry with retention of posterior pair of testes only *opp* protandry protogyny *opp* protandry

**metanephri** (mēt'ānēf'rik) *a* [Gk. *metas* after *nephros* kidney.] *Part* or in region of hind-kidney

- metanephros** (mēt'ănēf' rōs) *n* [Gk. *metē* after *nephros* kidney] The organ arising behind mesonephros and replacing it as functional kidney of fully-developed Amniota.
- metanotum** (mēt'ănō'tŭm) *n* [Gk. *metē* after *noton* back.] Notum or tergum of insect metathorax.
- metanucleus** (mēt'ănō'klēŭs) *n* [Gk. *metē* after *L. nucleus* kernel.] Egg-nucleolus after extrusion from germinal vesicle.
- metapeptone** (mēt'ăpēp'tŏn) *n* [Gk. *metē* after *peptos* digested.] A product of action of gastric juice on albumina.
- metaphase** (mēt'ăfāz) *n* [Gk. *metē* after *phainomai* to appear] The stage outon or meiosis in which chromosomes re split up in equatorial plate.
- metaphery** (mēt'ăf'eri) *n* [Gk. *metē*, beyond *pheros* to bear] Displacement of rgana.
- metaphloem** (mēt'ăflob em) *n* [Gk. *metē* after *phloos* inner bark.] The phloem of secondary xylem.
- metaparagms** (mēt'ăf'rlg'mā) *n* [Gk. *metē* after *paragms* fence] An internal metathoracic septum in insects.
- metaphysis** (mēt'ăf'izis) *n* [Gk. *metē*, besides *physis* growth] Paraphyses, *q* of fungi.
- metaphyte** (mēt'ăf'it) *n* [Gk. *metē* after *phytos* plant.] A multi cellular plant *egg* protophyte.
- metaplasia** (mēt'ăplā'siā) *n* [Gk. *metē*, change of *plasis* moulding] Conversion of tissue from one form to another, as in ossification.
- metaplasia** (mēt'ăplā'siā) *n* [Gk. *metē* after *plasis* moulding] The mature period in lif of an individual.
- metaplasia** (mēt'ăplā'siā) *n* [Gk. *metē* after *plasis* moulding] Lifeless ergastic ingredients of protoplasm, *egg* to living material or organoids.
- metaplastic** (mēt'ăplā'stik) *a*. [Gk. *metē* after *plastos* moulded.] *Peri* metaplasia *peri* metaplasia.
- metaplastic or metaplastic bodies**, —grains of protoplasm which are stages or products of metabolism and not true protoplasm.
- metapleural** (mēt'ăploor'il) *a*. [Gk. *metē* after *pleura* side.] Posteriorly and laterally situated *peri* metapleura *peri* metapleuron.
- metapleura** (mēt'ăploor) *n*. [Gk. *metē* after *pleura* side.] An abdominal or ventro-lateral fold of integument of certain primitive Chordata.
- metapleuron** (mēt'ăploor'on) *n* [Gk. *metē* after *pleura*, side.] The plicuron of insect metathorax.
- metapneustic** (mēt'ănō'stik, pŏt') *a*. [Gk. *metē* after *phneuma*, breath.] *Appl* insect larvae with only the terminal pal of spiracles.
- metapodeon** (mēt'ăpōd'ēon) *n* *metapodum* (mēt'ăpōd'itŭm) *n*. [Gk. *metē*, after *pus* foot.] That part of insect abdomen behind petiole or podcon.
- metapodial** (mēt'ăpōd'ial) *a*. [Gk. *metē*, after *pus* foot.] *Peri* a metapodeon or metapodum.
- metapodium** (mēt'ăpōd'itŭm) *n*. [Gk. *metē* after *pus* foot.] Posterior portion of molluscan foot portion of foot between tarsus and digits in four footed animals, metacarpus and metatarsus.
- metapodosoma** (mēt'ăpōdōsō mā) [Gk. *metē* after *pus* foot *soma* body] Body region bearing third and fourth pal of legs in Acarna.
- metapolar cells**, —second circle of cells of polar cap of rhombogen of Rhombozoa.
- metapophysis** (mēt'ăpōf'izis) *n*. [Gk. *metē*, after *epi* from *physis* to grow] A prolongation of vertebral articula process developed in certain vertebrates mammillary process.
- metapore** (mēt'ăpō) *n*. [Gk. *metē* after *poros* channel.] The medial aperture in roof of fourth ventricle of brain Magendie's foramen.

- m** **metapostscutell** **m** (mēt'āpōstskūl tē'fūm) *n.* [Gk. *metas*, after, *L. post* after *scutellum* small shield.] Postscutellum of insect metathorax.
- metapraescutum** (mēt'āprēskūtūm) *n.* [Gk. *metas* after; *L. prae* before *scutum* shield.] Praescutum of insect metathorax.
- metapterygium** (mēt'āterij'tūm) *n.* [Gk. *metas*, after *pterygion* little wing.] The posterior basal flange, pectoral or pelvic of recent elasmobranchs.
- metapterygoid** (mēt'āter'igōid) *n.* [Gk. *metas* after *pteryx* wing *oides* form.] Posterior of three pterygoid elements in certain lower vertebrates.
- metaptil** (mēt'ātil -pīl) *n.* [Gk. *metas* after *ptilon* feather.] A plumose penna or feather of meoptile, teleoptile.
- metarachia** (mēt'ārā'khi) *n.* [Gk. *metas*, after *hachis* spine.] Face of Pennatulacea which coincides with sulcar aspect of terminal zooid—so-called dorsal surface.
- metascutell** **m** (mēt'āskūtūl fūm) *n.* [Gk. *metas*, after *L. scutellum* small shield.] Scutellum of insect metathorax.
- metascutum** (mēt'āskūtūm) *n.* [Gk. *metas*, after *L. scutum*, shield.] Scutum of insect metathorax.
- metastism** (mēt'āstīzm) *n.* [Gk. *metas*, after *stis* food.] A cannibalistic mode of life.
- metasoma** (mēt'āso'mā) *n.* [Gk. *metas* after *soma*, body.] The six terminal segments of opisthosoma of Eurypterida, posterior body-region of Arachnoides, post abdomen, abdomen, as of woodlice.
- metasomati** (mēt'āso'mātīk) *a.* [Gk. *metas* after *soma*, body.] *Part.* or situated in metasoma.
- metasperm** (mēt'āspērm) *n.* [Gk. *metas*, after *sperma*, seed.] A plant having seeds in closed ovary an angiosperm.
- metasporangium** (mēt'āspōrānjūm) *n.* [Gk. *metas*, after *sperma* seed *angion* vessel.] A sporangium

- containing resting spores, as in Bacillaceae.
- m** **tastasis** (mētās'tāsis) *n.* [Gk. *metastasis* removal.] Metabolism, transference of function from one organ to another, transport of bacteria by the circulatory system.
- metastatic** **lff** history—that of certain Trematoda in which the young form, after entering intermediary host, metamorphoses into adult, after which intermediate host is swallowed by final host.
- metasternum** (mēt'āstēr'nūm) *n.* [Gk. *metas*, after *L. sternum* breast bone.] The sternum of insect metathorax, posterior sternal part, or xiphisternum, of Anura, xiphoid or emiform process, posterior part of sternum of higher vertebrates.
- metastheni** (mēt'āsthēn'ik) *a.* [Gk. *metas* after *sthenos* strength.] With well-developed posterior part of body.
- m** **tastigmate** (mēt'āstīg'māt) *a.* [Gk. *metas* after *stigma*, mark.] Having posterior tracheal openings or stigmata, as in mites.
- metastoma** (mēt'āstō'mā) *n.* [Gk. *metas*, after *stoma*, mouth.] The two-lobed lower lip of Crustacea, hypopharynx of Myriopoda, median plate behind mouth in Palaeostraca, metastome.
- metastucture** (mēt'āstrūktū) *n.* [Gk. *metas*, after *L. struere* to build.] Ultramicroscopic organization.
- metasyndesis** (mēt'āsyn dēsis) *n.* [Gk. *metas*, after *syndesis* bond.] Telosyndesis *q.v.*
- metatarsal** (mēt'ātar'sāl) *a.* [Gk. *metas*, after *L. tarsus* ankle.] In region [metatarsus *appl.* arteries, veins, etc. *part.* metatarsal bones.
- m** **tatarsophalangeal** (mēt'ātar'sō-fālānjēāl) *a.* [Gk. *metas*, after *L. tarsus* ankle *Gk. phalanx* troop.] *Appl.* articulations between metatarsus and phalanges of foot.
- metatarsus** (mēt'ātar'sōs) *n.* [Gk. *metas*, after *L. tarsus* ankle.] Part of foot between tarsus and toes, first joint of tarsus in insects, first dactylopodite or basitarsus in spiders.

- metathalamus** (mēt'āthāl'āmūs) *n* [Gk. *metē* after *thalamos* chamber] The geniculate bodies of the thalamencephalon.
- metatherian** (mēt'āthēr'riān) *n*. [Gk. *metē* beyond *thērion* small animal] *Appl* marsupials, with short-term placenta and later development in marsupium.
- metathetely** (mēt'āthēt'ēl) *n* [Gk. *metathērōn* to run behind *telos* completion.] Hysterotely.
- metathorax** (mēt'āthō'rāks) *n* [Gk. *metē*, after *thorax* chest.] Posterior segment of insect thorax.
- metatracheal** (mēt'ātrā'hēāl) *n*. [Gk. *metē*, between L.L. *trachea* windpipe.] *Appl* wood with xylem parenchyma located independently of the vessels.
- metatroch** (mēt'ātrōk) *n*. [Gk. *metē* after *trochos* wheel.] 1 trochophore, a circular band of cilia behind the mouth.
- metatrophic** (mēt'ātrōf'ik) *n*. [Gk. *metē* change of *trophē* nourishment] Living on both nitrogenous and carbonaceous organic matter.
- metatympanic**,—*metotympanic*, *q.s.*
- metatype** (mēt'ātip) *n*. [Gk. *metē* after *typos* image.] A topotype of the same species as the holotype or lectotype.
- metaxenī** (mēt'āxē'nī) *n* [Gk. *metē* after L. *senex*, gifts] Physiological effect of pollen upon maternal tissue.
- metaxyl m** (mēt'āx'lēn) *n*. [Gk. *metē*, after *xylēn* wood] Secondary xylem with many thick-walled cells.
- metazoans** (mēt'āzō'ā) *n* [Gk. *metē* after *zōē* life.] A larval stage of Crustacea between zoea and megalopa stages.
- metaxonit** (mēt'āxōnīt) [Gk. *metē*, after *zonē* girdle] The posterior ring of diplosomite *Off* procoxae.
- metazoan** (mēt'āzō'ōn) *n* [Gk. *metē* after *zōē* animal.] A multicellular animal metazoan.
- metembryo** (mētēm'briō) *n*. [Gk. *metē* towards *embryon* embryo.] The gastrula.
- metencephal n** (mēt'enkef'ālōn-sēl) *n* [Gk. *metē* after *en* in *cephale* head.] Part of hind-brain consisting of cerebellum pons, and intermediate part of fourth ventricle or hind brain.
- metenteron** (mētēn'tērōn) *n* [Gk. *metē* after *enteron* gut.] Inter mesenteric chamber of sea-anemone or other coelenterate.
- metepimeron** (mēt'ēpīrō'n) *n*. [Gk. *metē* after *epi* pon *meros* upper thigh.] Epimeron of insect metathorax.
- metepisternum** (mēt'ēpīstēr'nūm) *n*. [Gk. *metē* after *epi* pon *sternon* breast-bone.] Episternum of insect metathorax *met*-episternum.
- metestrūm**,—*metoestrus* *q.s.*
- methaemoglobin** (mēt'hēmōg'lobīn) *n* [Gk. *metē*, after *haimes*, blood L. *globus* globe.] An oxidation product of haemoglobin HbO HbOH.
- metochy** (mēt'ōkē) *n*. [Gk. *metochē* sharing] Relationship between neutral guest insect and its host.
- metoecious** (mētē'siōs) *n*. [Gk. *metē*, after *oikos* house.] Metoecious or heteroecious with two hosts.
- metoestrus** (mētē'strūs) *n*. [Gk. *metē*, after *oestrus* gadfly] The luteal phase, period when activity subsides after oestrus *metoestrum*.
- metopē** (mēt'ōpē) *n* [Gk. *metopēon* forehead] The middle frontal portion of crustacean.
- metopis** (mēt'ōp'ik) [Gk. *metopēon* forehead.] *Part* forehead *appl.* frontal suture.
- metopio** (mēt'ōp'ion) *n* [Gk. *metopēon* forehead] Point on forehead where mid-sagittal plane intersects line connecting frontal eminences.
- metosteon** (mētō'stēōn) *n* [Gk. *metē*, after *osteon* bone.] A posterior sternal ossification in birds.
- metovum** (mētō'vūm) *n* [Gk. *metē* after L. *ovum* egg] A egg-cell surrounded by nutritive material.
- metoxone** (mētō'ōnēs) *n*. [Gk.

*met* [after *zmes* guest.] Parasitic on different hosts at different stages in life-history.

*metratema* (mĕ'tră'tĕm) *n*. [Gk. *metra* womb, *terma* end.] Terminal portion of uterus in trematodes.

*metula* (mĕ'tŭ'lă) *n*. [Dew of L. *metula*, end-pore.] A spore-bearing branch having flask-shaped outgrowths as in certain fungi.

*M* (actor, — a certain antigen in erythrocytes of higher animals.

*micella* (mĭs'ĕl'ă) *n*. [L. *dine* of *micel*, morsel.] Hypothetical unit, *q.v.* an orderly aggregate of chain-like molecules.

*microscapha* (mĭ'krō'skă'f'ă) *n*. *plu*. [Gk. *micro* small *scaphos* perceiver.] The smaller sensory organs of Placophora.

*microse* (mĭ'krō' sĕr) *n*. [Gk. *micro* small *seer* male.] A dwarf male ant.

*micro ergate* (mĭ'krō'ĕr'găt) *n*. [Gk. *micro* small *ergates* worker.] A dwarf worker ant.

*micro-aerophilae*, — organisms requiring less oxygen than is present in the air.

*microbe* (mĭ'krō'b) *n*. [Gk. *micro* small *bios* life.] A bacterium *a.* micro-organism.

*microbiology* (mĭ'krō'bĭ'ŏ'jĭ) *n*. [Gk. *micro* small *bios* life *logos* discourse.] Biology of microscopic organisms.

*microblast* (mĭ'krō'blăst) *n*. [Gk. *micro* small *blastos* bud.] An erythroblast smaller than normal.

*microcaltrop* (mĭ'krō'kă'l'trōp) *n*. [Gk. *micro* small A.S. *caltrop* kind of thistle.] A primitive tetrasac or cluster with four persistent rays.

*microcentrum* (mĭ'krō'sĕn'trĭm) *n*. [Gk. *micro* small *kentron* centre.] The dynamic centre of cell composed of centrosomes kinotonucleus.

*microcephalic* (mĭ'krō'sĕf'ă'ĭk, -sĕf) *n*. [Gk. *micro* small *kephale* head.] With abnormally small head having cranial capacity of under 1350 c.c. of megacephalic mesocephalic.

*microchromosome* (mĭ'krō'krō'sō'm) *n*. [Gk. *micro* small *chroma* colour *sōma* body.] A chromosome considerably smaller than the other chromosomes of the same type of nucleus M-chromosome.

*microconidium* (mĭ'krō'kōnĭ'dĭ'ŏm) *n*. [Gk. *micro* small *konis* dust *idion* dion.] A comparatively small conidium.

*microconjugant* (mĭ'krō'kōn'jō'gănt) *n*. [Gk. *micro* small L. *conjugare* to unite.] A motile ciliated free-swimming conjugant or gamete which attaches itself to a macroconjugant and fertilises it.

*microcyt* (mĭ'krō'sĭt) *n*. [Gk. *micro* small *kytis* bladder.] A resting spore stage of slime fungi.

*microcytase* (mĭ'krō'sĭ'tăz) *n*. [Gk. *micro* small *kytis* hollow.] The enzyme of microphages or smaller leucocytes.

*microcytes* (mĭ'krō'sĭtă) *n*. *plu*. [Gk. *micro* small *kytis* hollow.] Blood-corpuscles about half the size of erythrocytes, numerous in diseased conditions.

*microdont* (mĭ'krō'dōnt) *n*. [Gk. *micro* small *odous* tooth.] With comparatively small teeth.

*microevolution* (mĭ'krō'ĕvō'lŭ'shŭn) *n*. [Gk. *micro* small L. *evolver* to unroll.] Evolutionary processes that can be noticed within a relatively brief period as during a human life-time evolution due to gene mutation and recombination *Opp* macro-evolution.

*microfilaria* (mĭ'krō'fĭ'lă'rĭă) *n*. [Gk. *micro* small L. *filum* thread.] The embryo of *Filaria*.

*micro gamete* (mĭ'krō'gă'mĕ't) *n*. [Gk. *micro* small *gametes* spouse.] The smaller of two conjugant gametes regarded as male.

*microgametoblast* (mĭ'krō'gă'mĕ'tō'blăst) *n*. [Gk. *micro* small *gametes* spouse *blastos* bud.] Intermediate stage between microgametocyte and microgamete in certain Sporozoa.

microgametocyte (mī'krōgāmē tōlt) *n* [Gk. *micro* small *gametes* spouse *lylos* hollow] Cell developed from merozoite in certain protozoa giving rise to microgametes.

microgametogenesis (mī'krōgāmē tōjēn tōis) *n* [Gk. *micro* small *gamete* spouse *genesis* descent.] Development of microgametes in spermatozoa.

microgamy (mī'krōg'āmī) *n* [Gk. *micro* small *gamos* marriage.] Syngamy between smallest individuals produced by fusion or gemmation, as in Foraminifera microgamy.

microgilia (mī'krōgī'ā, mī'krōgī'ā) *n* *pl.* [Gk. *micro* small *gilia*, glue.] Mesodermal phagocytic cells in grey and white nervous matter mesogilia.

microgonidium (mī'krōgōnid'jūm) *n* [Gk. *micro* small *gonos* off spring *idion* own] A comparatively small gonidium male gamete or gametocyte.

microgyne (mī'krōjīnē) *n*. [Gk. *micro* small *gyne* female.] Dwarf female ant.

microhazard (mī'krōbēn'āld) *n* [Gk. *micro* small *hazard* unit.] A filter passer.

microlecithal (mī'krōlē'sthāl) *n*. [Gk. *micro* small *lekithos* yolk.] Containing little yolk.

microleucocyt (mī'krōlē'lobēlt -loo-) *n* [Gk. *micro* small *leukos* white *lylos* hollow] A small amoebocyte.

micromere (mī'krōmēr) *n* [Gk. *micro* small *meros* part] A cell of upper or animal hemisphere in meroblastic and other eggs.

micromerozoite (mī'krōmērōzōit) *n*. [Gk. *micro* small *meros* part *zōon* animal] Cell derived from microschizont and developing into gametocyte Haemosporidia.

micromesenteric (mī'krōmēs'entērī mēr) *n* [Gk. *micro* small *mesos* middle *enteron* gut] A secondary incomplete mesentery in Zoantharia.

micromutation (mī'krōmūtā'shūn)

*n* [Gk. *micro* small *metabole* to change.] Mutation as only on gene locus genevariation point mutation transmutation.

micromyelocyte (mī'krōmī'ēlōit) *n*. [Gk. *micro* small *myelos* marrow *lylos* hollow] A small heterophil myelocyte.

micron (mī'krōn) *n*. [Gk. *micro* small.] Micromillimetre one thousandth part of a millimetre symbol  $\mu$ .

micronephridia (mī'krōnēfrīd'ia) *n* *pl.* [Gk. *micro* small *nephros*, kidney *idion*, own.] Small nephridia micronephridia.

micront (mī'krōnt) *n* [Gk. *micro* small *on* being] A small cell formed by schizogony itself giving rise to microgametes.

micronucleocyte (mī'krōnō'klēōit) *n*. [Gk. *micro* small *L. nucleus* kernel Gk. *lylos* hollow] An amoebocyte with a relatively small nucleus.

micronucleus (mī'krōnō'klēōs) *n* [Gk. *micro* small *L. nucleus* kernel.] The smaller reproductive nucleus of many protozoa, in close proximity to meganucleus; gononucleus.

micro-nutrients,—substances essential to health of organisms, but required in minute quantity e.g. trace elements, *q.v.*

micro-organism (mī'krō-ōr'gāniz'm) *n* [Gk. *micro* small *organon* instrument] A microscopic organism microbe protist.

microparasite (mī'krōpār'āsīt) *n* [Gk. *micro* small *para* beside *sites* food.] A parasite of microscopic size.

microphages (mī'krōfāj'ez) *n. pl.* [Gk. *micro* small *phagō* to eat.] Chiefly the polymorphonuclear heterophil leucocytes.

microphagic (mī'krōfāj'ik) *n*. [Gk. *micro* small *phagō* to eat.] Feeding on minute organisms or particles, *appl.* protozoan microphagous, feeding on small prey *appl.* agnathous fishes *Opp.* macrophagous.

microphagocyt (mī'krōfāg'ōsīt) *n.* [Gk. *micros* small *phagō* to eat *kytos* hollow] A macrophage or small phagocyte of blood.

microphanerophyte (mī'krōfān'ērōfīt) *n.* [Gk. *micros* small *phaneros* manifest *phyton* plant.] Tree or shrub from to 8 metres in height.

microphil (mī'krōfīl) *a.* [Gk. *micros* small *philos*, to love.] Tolerating only narrow range of temperature *appl.* certain bacteria microphilic. *n.* Mikrophile.

microphyll *na* (mī'krōfīl'ūs) *a.* [Gk. *micros* small *phyllon* leaf.] With small leaves.

microphyte (mī'krōfīt) *n.* [Gk. *micros* small *phyton*, plant.] A microscopic plant.

microphytology (mī'krōfītōl'ōjī) *n.* [Gk. *micros* small *phyton* plant *logos* discourse.] Science of microphytes bacteriology

microplankton (mī'krōplāng'kītōn) *n.* [Gk. *micros* small *planktos* wandering] Small organisms drifting with the surrounding water somewhat larger than those of nanoplankton, *q.v.*

micropodous (mī'krōp'ōdūs) *a.* [Gk. *micros* small; *pus* foot.] With rudimentary or small foot or feet.

micropore (mī'krōpōr) *n.* [Gk. *micros* small *poros* channel.] A small pore in Chilton shell containing sense-organ.

micropterism (mī'krōptērīzōm) *n.* [Gk. *micros* small *pteron*, wing] Condition of having unusually small wings, as in some insects.

micropter *us* (mī'krōptēr'ūs) *a.* [Gk. *micros* small *pteron* wing] Having small hind wings inviable till tegmina are expanded, as in some insects with small or rudimentary fns.

micropyl (mī'krōpīl) *n.* [Gk. *micros* small *pylos* gate.] Aperture for admission of pollen-tube at ovule apex aperture between hilum and point of radicle small opening in

cyst wall of macrogamete for entry of microgamete pore of oocyst aperture in egg-membrane for admission of spermatozoon; pore in spongin-coat of sponges for escape of gemmae.

micropyl apparatus,—raised processes or porches, sometimes of elaborate structure developed round micropyl of certain insect eggs.

micropyrant (mī'krōpīr'ānt) *a.* [Gk. *micros* small *pyron* fruit stone.] With nuclei markedly smaller than veget. for the species or other group. *n.* A micropyrantic individual.

microhabēus (mī'krōhīb'dēs) *n.* [Gk. *micros* small *habēus* rod.] Minute monaxon rod-like spicule.

microschizogony (mī'krōschīzōg'ōnī) *n.* [Gk. *micros* small; *schizō* to cleave; *genesis* birth.] Schizogony resulting in small macrocytes.

microschizont (mī'krōschīzōnt') *n.* [Gk. *micros* small *schizonts* to cut *ensis*, being.] A male schizont of certain protozoa.

microscleere (mī'krōsklē'r) *n.* [Gk. *micros* small *skleeros* hard.] One of small spicules found lying scattered in tissues of sponges. *Opp.* megascleere.

microseptum (mī'krōsēp'tūm) *n.* [Gk. *micros* small *L. septum* partition.] An incomplete masonry of Zoantharia.

microserie (mī'krōsēr) *n.* [Gk. *micros*, small *L. series* to put in row] A successional series of plant communities in microhabitat.

microsmat (mī'krōsmāt'ik) *a.* [Gk. *micros* small *smos* small.] With feebly-developed sense of smell

microsome (mī'krōsōm) *n.* [Gk. *micros* small *sōmos* body] Granule of protoplasm as opposed to ground-substance; minute particle centre for enzyme localisation, in cytoplasm.

microsorius (mī'krōsōr'ūs) *n.* [Gk. *micros* small *soros* heap] A worm containing microsporangia, *opp.* megasorus.



- microspeci** s (m'krōspē'slās) *n.* [Gk. *micro* s small] *L. species* particular kind] A small species or subspecies with little variability Jordanon.
- microsphere** (m'krōsfēr) *n.* [Gk. *micro* s small] *sphaera* globe.] The initial chamber of Foraminifera when very small centrosphere.
- microspheric** (m'krōsfēr'ik) *a.* [Gk. *micro* s small] *sphaera*, globe.] *Appl.* foraminifera when initial chamber is small.
- microsplanchnic** (m'krōsplāngk'n'ik) *a.* [Gk. *micro* s small] *splanchnon* entrail.] Small-bodied and long-legged.
- microsporangium** (m'krōspōrāng'jūm) *n.* [Gk. *micro* s small] *spora* seed *angion* vessel.] A sporangium bearing number of microspores pollen sac rather lobe of phanerogams.
- microspore** (m'krōspōr) *n.* [Gk. *micro* s small] *spora* seed.] The spore developed in a microsporangium of heterosporous plants the cell from which a pollen grain develops a pollen grain androspore the smaller anisospore of Sarcodina
- microsporocyte** (m'krōspō'rōst) *n.* [Gk. *micro* s small] *spora* seed *cyte* hollow] The pollen mother cell which produces microspores resulting from two meioses
- microsporophore** (m'krōspō'rōfōr) *n.* [Gk. *micro* s small] *spora* seed *phoris* to bear] A microsporangium.
- microsporophyll** (m'krōspō'rōf'ill) *n.* [Gk. *micro* s small] *spora* seed *phyllon*, leaf] A microsporangium-bearing leaf stamen.
- microsporozoite** (m'krōspō'rōzō'it) *n.* [Gk. *micro* s small] *spora* seed *zoon* animal.] A smaller endogenous sporozoite of Sporozoa.
- microstome** (m'krōstōm) *n.* [Gk. *micro* s small] *stoma* mouth.] A small opening or orifice.
- microstrobilus** (m'krōstrōb'illūs) *n.* [Gk. *micro* s small] *strobilus* cone] A small cone as in cycads.
- microstylospore** (m'krōstī'lospōr) *n.* [Gk. *micro* s small] *stylos* pillar *spora* seed.] A comparatively small stylospore.
- microstylous** (m'krōstī'lūs) *a.* [Gk. *micro* s small] *stylos* pillar] Having short styles *appl.* heterostylous flowers.
- microtaxon** my (m'krōtākso'n'den) *n.* [Gk. *micro* s small] *taxis* arrangement *nomen* law] Classification and its principles as applied to subspecies varieties, or races.
- microthe** m (m'krōtērm) *n.* [Gk. *micro* s small] *thermos* heat.] A plant of the cold temperate zone.
- microtrichia** (m'krōtrīk'iā) *n. pl.* [Gk. *micro* s small] *trichis* hair] Small hairs without basal articulation on insect wings.
- microtype** (m'krōtīp) *n.* [Gk. *micro* s small] *L. typus* type.] Normal mesenteric arrangement of Antisoma of macrotype.
- micros** id (m'krōs'id) *n.* [Gk. *micro* s small] *zoon* animal *idion* own] Male gamete as in algae.
- microzooid** (m'krōs'ōid) *n.* [Gk. *micro* s small] *zoon* animal *eidos* form.] A free-swimming motile ciliated bod of Vorticella and other protozoa.
- microzoon** (m'krōs'ōon) *n.* [Gk. *micro* s small] *zoon* animal.] A microscopic animal.
- microzoospore** (m'krōs'ōspōr) *n.* [Gk. *micro* s small] *zoon* animal *spora* seed.] Small planogamete small anisospore of Radiolana.
- microzyma** (m'krōzī'mā) *n.* [Gk. *micro* s small] *zyms* leaven] A hypothetical ultimate unit, *see*
- microzym** (m'krōzīm) [Gk. *micro* s small] *zyms* leaven.] A micro-organism of fermenting or decomposing liquids.
- mictan** (mīk'tan) *n.* [Gk. *micro* s mixed *an* being] A species resulting from interspecific hybridization and of which the individuals are infertile.
- micturition** (mīk'tōr'ish'ōn) *n.* [L. *minger* to urinate] Act

of voiding content of urinary bladder urination.

**mid-body**—a cell plate or group of granules in equatorial region of spindle in anaphase of mitosis.

**mid brain**,—middle zone of primitive or embryonic brain mass cephalon of adults.

**middle layer**—the layer derived from the cell plate, and covered on both sides by cellulose in formation of the wall of plant cell.

**mid-rib**—the large central vein of a leaf, continuation of the petiole.

**midriff** (mid'rif) *n.* [A.S. *mid*]

**middle** *kris* belly] The diaphragm or muscular partition between thoracic and abdominal cavities.

**Miescher** tubes [F. *Miescher* Swiss pathologist]. Rainey tubes.

**migration** (migrā'shūn) *n.* [L. *migrare* to transfer] Change of habitat according to season, climate food-supply etc. of birds, reindeer bats, certain fishes, insects etc. movements of plants into new area.

**migratory cell**,—an amoeboid cell or leucocytes of blood wandering cell.

**miliary** (mil'iārī) *a.* [L. *milium* millet.] Of granular appearance consisting of small and numerous grain-like parts.

**milk-teeth**,—first dentition of mammals, shed after or before birth deciduous teeth.

**milts** (milt) *n.* [A.S. *milte* spleen.] The spleen tests of fishes.

**mimetic** (mimē'tik) *a.* [Gk. *mimētikos* imitative.] *Part.* or exhibiting mimicry

**mimic** (mim'ik) *v.* [Gk. *mimēsthai* imitating] To assume, usually for protection, the habits, colour or structure of another organism.

**mimicry** (mim'ikrī) *n.* [Gk. *mimēsthai* imitating] Assumption of resemblance in colour or structure as means of self-protection camouflage.

**minim** (min'im) *n.* [L. *minimus* least.] An ant of the smallest worker caste.

**minimum**, law of the—that factor for which an organism or species has the narrowest range of tolerance or adaptability limits its existence extension of Liebig law *q.v.*

**minimus** (min'imūs) *n.* [L. *minimus* least.] Fifth digit of hand or foot.

**minor** *al me te*,—trace-elements, *q.v.*

**Miocene** (miō'sēn) *n.* [Gk. *miolos* less *Aionos* recent.] A Tertiary geological epoch, between Oligocene and Pliocene.

**miostemonous**,—meiostemonous.

**miotic**,—mitotic, *q.v.*, myotic, *q.v.*

**miracidi** *m* (mir'aid'idūm) *n.* [Gk. *dim.* of *miracium*, strippling] The ciliated embryo or youngest stage in life-history of trematode.

**miscogenation** (mis'ejēnā'shūn) [L. *miscere*, to mix *genus* race.] Interbreeding between races or varieties.

**misogamy** (misōg'āmī) *n.* [Gk. *misos* to hate *gamos* marriage.] Antagonism to mating reproductive isolation.

**mitochondria** (mit'ōkōn'drīā) *n. plur* [Gk. *mitos* thread *chondros* grain.] Granular rod-shaped, or filamentous organelles in cytoplasm varying in different tissues and functioning in cell respiration and nutrition chondriosomes, and numerous other synonyms.

**mitochondrial sheath**,—an envelope containing mitochondrial granules sheathing spiral thread of spermatozoan body or connecting piece.

**mitogenetic** (mit'ōjēnē'tik) *a.* [Gk. *mitos* thread *genesis* descent.] Inducing cell division *appt.* influence inducing mitosis in apical meristem and emanating from the same or another apical meristem *appt.* radiation, Gurwitsch or M rays from living matter and supposed to induce mitosis.

- mitome** (mī'tōm) *n.* [Gk. *mitos* thread.] Reticulum of cell protoplasm *app* ground-substance
- mitoschisis** (mī'tōs'kīsis) *n.* [Gk. *mitos* thread *schisis* to cleave.] Indirect nuclear division mitosis.
- mitosis** (mī'tōs'is) *n.* [Gk. *mitos* thread.] Indirect or karyokinetic nuclear division with chromosome-formation spindle-formation with or without centrosom activity *app* amitosis *cf* meiosis.
- mitosome** (mī'tōsōm) *n.* [Gk. *mitos* thread *soma* body] A body arising from spindle-fibres of secondary spermatocytes eventually said to form connecting piece and tail envelope of spermatozoon the spindle-remnant *cf* paranucleus.
- mitotic** (mī'tōt'ik) *a.* [Gk. *mitos* thread.] Pert or produced by mitosis *app* division figure.
- mitotic index**—the number of cells simultaneously in the process of division out of total of on thousand cells.
- mitotin** (mī'tōt'īn) *n.* [Gk. *mitos* thread] Substance supposed to act with an enzyme mitotase in generating mitogenetic radiation.
- mitra** (mī'trā) *n.* [L. *mitra* head band.] A helmet-shaped part of calyx or corolla the mitriform pileus of certain fungi.
- mitral cells**,—pyramidal cells with thick basal dendrites found in molecular layer of olfactory bulb.
- mitral valve**,—bicuspid valve of the left auriculo-ventricular orifice of the heart.
- mitriform** (mī'trī'fōrm) *a.* [L. *mitra* head-band *forma* shape.] Mitre shaped.
- mixipterygium** (mīk sīptēr'j'ium) *n.* [Gk. *mixis* mixing *pterygion*, little wing or fin.] Clasper of male elasmobranchs, medial lobe of pelvic fin.
- mixochromosome** (mīk sīkrō mō'sōm) *n.* [Gk. *mixis* mixing *chroma* colour *soma* body] The new chromosome formed by fusion of a pair in syndesis or synapsis
- mixoploidy** (mīk sīplōid'ī) *n.* [Gk. *mixis* mixing *haploos* onefold *eidos* form.] Condition of having cells or tissues with different chromosome numbers in the same individual as in chimeras or mosaics.
- mixotrophic** (mīk sītrō'f'ik) *a.* [Gk. *mixis* mixing, *trophos* to nourish.] Combining holophytic with saprophytic nutrition obtaining part of nourishment from an outside source partly parasitic.
- mnemic** (nē'mīk) *a.* [Gk. *mneme* memory] *App* theory which attributes hereditary phenomena to latest memory of past generations.
- mnemotaxis** (nē'mōtāk'sis) *n.* [Gk. *mneme* memory *taxis* arrangement.] Locomotion directed by memory stimulus, as returning to feeding place and homing.
- moderator** (mōd'ērātōr) *n.* [L. *moderator* regulator] Band of muscle checking excessive distention of right ventricle as in heart of some mammals.
- modification** (mōd'ifīkā'shōn) *n.* [L. *modus* measure *facere* to make.] A phenotypic change due to environment or function.
- modifier** (mōd'ifīk'r) *n.* [L. *modus* measure *facere* to make] A factor which modifies the effect of another factor *gene* which modifies function of *gene* at different locus
- modiolus** (mōd'īōl'ūs) *n.* [L. *modulus* small measure.] The conical central axis of cochlea of ear
- modulated** (mōd'ūlat'ēd) *n.* [L. *modulus* measured.] Dedifferentiation and redifferentiation of cells during definitive tissue development.
- modulator** (mōd'ūlatōr) *n.* [L. *modulus* measured] A band of the spectrum localized in the red yellow green, and blue regions, which evokes colour sensation physiological unit of colour reception *cf* dominator
- molar** (mō'lār) *a.* [L. *molare* to grind] Adapted for grinding *app* teeth *app* buccal glands.

molecular hypothesis,—the supposition that muscle and nerve are composed of molecules or particles, like the molecules of a magnet, with positive and negative surfaces.

molecular layer—external layer of cortex of cerebrum and cerebellum a layer of olfactory bulb plexiform layer

molluscoid (mól'úsk'oid) *a.* [*L. mol* *herus* soft *Gk. eidas* like.] Resembling mollusc characteristic of mollusc *part.* Molluscoides.

molt,—see moult, ecdysis.

monacanthid (món'ákán'thíd) *a.* [*Gk. monos* alone *ákanthos* thorn.] With one row of ambulacral spines, as certain starfishes.

monactinal (món'ák'tínál) [*Gk. monos* single; *aktis* ray] *Appl.* monactine or single-rayed spicule.

monactinellid (món'ák'tínél'íd) *a.* [*Gk. monos* single *aktis* ray] Containing uniaxial spicules only as certain sponges.

monad (món'ád) *n.* [*Gk. monos* unit.] A primitive organism or organic unit flagellate form of a protozoan single cell, instead of tetrad, produced by spore mother-cell owing to meiotic anomaly

monadelphus (món'adél'fús) [*Gk. monos* single; *adelphos* brother.] Having stamens united into one bundle by union of filaments.

monadiform (món'ád'fór'm) *a.* [*Gk. monos* unit *L. forma*, shape.] Like flagellate protozoan

monandrous (món'án drús) *a.* [*Gk. monos* alone *andros* male.] Having only one stamen having only one male mate.

monarch (món'árk) *a.* [*Gk. monos* alone *arche* beginning] With only one protoxylem bundle.

monaster (món'ás'tér) *n.* [*Gk. monos* alone *aster* star] The single aster of monocentric mitosis.

monaxial (món'ák'siál) *a.* [*Gk. monos* alone *axis* axis.] Having one line of axis uniaxial having inflorescence developed on primary axis.

monaxon (món'ák'són) *n.* [*Gk. monos* alone *axis* axis.] A type of spicule built upon a single axis.

monaxonic (món'ák'són'ík) *a.* [*Gk. monos* alone *axis* axis.] Elongate *appl.* types of protozoa with one long body-axis with one axon, *appl.* nerve cell.

monocious,—monoecious, *q.v.*

monembryonic (món'ém'hé'són'ík) *a.* [*Gk. monos* alone *embryon*, foetus.] Producing one embryo at time.

monergic (món'ér'jík) *a.* [*Gk. monos* alone *ergos* active.] Having one energid consisting of one nucleated cell.

monoestrous,—monoecious, *q.v.*

monilicorn (món'il'íkór'n) *a.* [*L. monile* necklace *cornu* horn.] Having antennae with appearance of chain of beads.

moniliform (món'il'fór'm) *a.* [*L. monile* necklace; *forma*, shape.] Constricted at regular intervals, giving appearance of a chain of beads *appl.* nucleus of certain infusoria with contractions and expansions alternately as branches of certain roots.

monilostyle (món'im'dést'il'ík) *a.* [*Gk. monos* fixed *style* pillar.] Exhibiting monilostyly or having quadrate united to squamose, and sometimes to other bones, as in certain reptiles of streptostyly.

monocardian (món'ókár'dián) *a.* [*Gk. monos* alone *kardia*, heart.] Having one auricle and ventricle.

monocarp (món'ókárp) *n.* [*Gk. monos* alone *karpos* fruit.] A monocarpic plant.

monocarpellary (món'ókár'pél'ári) [*Gk. monos* single *karpos* fruit.] Containing single carpel.

monocarpal (món'ókár'pík) *a.* [*Gk. monos* alone *karpos* fruit.] Dying after bearing fruit once.

monocarpous (món'ókár'pús) *a.* [*Gk. monos* alone *karpos* fruit.] Having one ovary developed from the gynoeceum.

monocaryon,—monokaryon.

- monocentric (môn-ên trik) *a.* [Gk. *monos* single *kytron* centre] With a single centromere.
- monocephalous (môn'ôkêf'âlûs -sêf) *a.* [Gk. *monos* alone *képhale* head.] With one capitulum only.
- monocercous (môn'ôêr'kûs) *a.* [Gk. *monos* single *kerys* tail.] With one flagellum, as certain protozoa.
- monoceros (môn'ôêr'êrûs) *a.* [Gk. *monos* single *keras* horn.] Having one horn only.
- monochasium (môn ôkâ sîâm) *n.* [Gk. *monos* alone *chasis* division.] A cymose inflorescence with main axes producing one branch each.
- monochlamydeous (môn ôklâmîd'êûs) *a.* [Gk. *monos* alone *chlamys* cloak.] Apetalous having calyx but no corolla.
- monochorionic (mô ôkôrîôn'îk) *a.* [Gk. *monos* single *chorion* skin.] Having a single chorion *appl.* uniovular twins.
- monochrous (môn krôn'îk) *a.* [Gk. *monos* alone *chrouos* time.] Occurring originating only once.
- monociliated (môn'ôsil'îâtêd) *a.* [Gk. *monos* single *l. cilium* eyelid.] Having one flagellum unil-flagellate.
- monoclinus (môn ôklî'nûs) *a.* [Gk. *monos* alone *khus* couch.] Hermaphrodite having stamens and pistil in each flower.
- monocotyledonous (mônôkôt'îl'êdônûs) *a.* [Gk. *monos* alone *kotyledon* cup-shaped hollow.] Having one cotyledon, or embryo-lobe.
- monorepid (môn ôkrêp'îd) *a.* [Gk. *monos* alone *bryos* foundation.] *Appl.* a desma formed by secondary silica deposits on monaxal spicule.
- monoculus (mônôk'ûl) *n.* [Gk. *monos* single *l. oculus* eye.] A one-eyed animal, as certain insect and crustaceans.
- monocyclic (môn'ôklîk'îk) [Gk. *monos* alone *kyklos* circle.] Having one whorl annual *appl.* herba.
- monocytes (môn'ôsit) *n. plu.* [Gk. *monos* alone *kytos* hollow.] The group of white blood corpuscles including large mononuclear and transition cells endothelial leucocytes histiocytes.
- monodactylous (mô 'ôdak'tîlûs) [Gk. *monos* alone *dactylus* finger.] With one digit only.
- monodelphic (mônôdêl'îk) *a.* [Gk. *monos* alone *dêlphos* womb.] Having uteri more or less united, as in placental mammals having single uterus, as *appl.* certain nematodes.
- monodelphous, — monodelphous *g.s.*
- monodesmotic (môn ôdês'mîk, -dês) *a.* [Gk. *monos* single *dêsmos* bond.] *Appl.* scales formed of fused lepidomoria with continuous covering layer of dentine, as some placoid scales.
- monodont (mô ôdôn't) *a.* [Gk. *monos* single *odous* tooth.] Having one persistent tooth as male narwhal with one long tusk.
- monoeious (mônê'îûs) *a.* [Gk. *monos* single *oikos* house.] Ambisexual with male and female flowers on same plant with sex organs on one gametophyte hermaphrodite.
- monoeiuous (mônê'strûs) *a.* [Gk. *monos* alone *oistros* gadfly.] Having one oestrous period in a sexual season / polyoestrous.
- monofactorial, — unifactorial, *g.s.*
- monogamous (mônôg'âmûs) *a.* [Gk. *monos* single *gamos* marriage.] Consorting with one mate only.
- monoganglious (môn ôgâng'gîlôn'îk) *a.* [Gk. *monos* single *ganglion* little tumour.] Having a single ganglion.
- monogastric (môn ôgâs'trîk) *a.* [Gk. *monos* single *gaster* stomach.] With only one gastric cavity.
- monogenetic (môn'ôjên'êtîs) *a.* [Gk. *monos* alone *genesis* descent.] Asexual reproduction theory of development of all organisms from single cells origin of new form at one place or period.

monogenetic (môn'ôjênt'ik) *n* [Gk. *monos* alone *genesis* descent.] Reproducing asexually direct as *appl.* reproduction monogenic.

monogenic (môn'ôjên'ik) *n* [Gk. *monos* single *genesis* sex.] Producing offspring consisting of one sex either arrhenogenic or thelygenic controlled by single gene.

monogynous (mô'ôjên'm'ik) [Gk. *monos* single *gynê* off spring.] Having single set of chromosomes.

monogynous (mônôj'ên's) *n* [Gk. *monos* alone *gynê* offspring.] Asexual as *appl.* reproduction.

monogyny (mônôj'ên') *n* [Gk. *monos* single *gynê* sex.] Production of offspring consisting of one sex arrhenogyny and thelygyny.

monogynoporous (môn ôjênôp'ôrits) *n* [Gk. *monos* alone *gynê* off spring *poros* channel.] Having one genital pore common to both male and female organs as in certain Turbellaria.

monogony (mônôj'ên') *n* [Gk. *monos* alone *gynê* offspring.] Asexual reproduction including schizogony and gemmation.

monogynaeal (môn ôjên'âil) *n* [Gk. *monos* alone *gynê* female *oikos* house.] Developing from one pistil monogynaeal.

monogynous (mônôj'ên's) *n* [Gk. *monos* alone *gynê* female.] Having one pistil only coexisting with but one female.

monohybrid (môn ôh'ibrid) *n* [Gk. *monos* alone *L. hybridus*, mongrel.] A hybrid offspring of parents differing in one character.

monokaryon (môn ôk'âr'ôn) *n* [Gk. *monos* alone *karyon* nut.] A nucleus with single centrole.

monokoel (môn ôk'ênt) *n* [Gk. *monos* single *koelios* pole.] Uniflagellate.

monolophous (môn ôlôf'us) *n* [Gk. *monos* alone *lophos* crest.] *Appl.* spicules with one ray forked or branched like crest.

monomastigat (môn ômâs'tigat) *n* [Gk. *monos* single *mastix* whip.] Having one flagellum as certain Protista.

monomelicous (môn ômên'h'kîts) *n* [Gk. *monos* alone *melichos* small moon.] Having an eye with only one lens.

monomeri (môn ômêr'ik) *n* [Gk. *monos* alone *meros* part.] Part, one segment derived from one part bearing dominant gene typically on of two loci.

monomeroseomatus (môn ômêr ôdôm'itits) *n* [Gk. *monos* alone *meros* part *soma*, body.] Having body-segments all fused together as in certain insects.

monomerous (mônôdôm'êrits) *n* [Gk. *monos* alone *meros* part.] Consisting of one part only *appl.* flower whorls.

monometrosis (môn ômê'trôitits) *n* [Gk. *monos* alone *metros* mother.] Colony foundation by one female as by queen in some social Hymenoptera. *Appl.* pleometrosis.

monomial (mônô'miâl) *n* [Gk. *monos* single *L. nomen* name.] *Appl.* name or designation consisting of one term only of binomial.

monomorphi (môn ômô'fik) *n* [Gk. *monos* single *morphê* form.] Developing with no or very slight change of form from stage to stage as certain protozoa and insects of polymorphic producing spores of one kind only.

monomyaric (môn ômîl'rik) *n* [Gk. *monos* alone *my* muscle.] With posterior adductor only anterior adductor being aborted *appl.* certain bivalves monomyarian.

mononeuron (môn ônêr'ôn'ik) *n* [Gk. *monos* alone *neuron* nerve.] With one nerve *appl.* chromatophores with single type of innervation.

monont (môn ônt) *n* [Gk. *monos* alone *on*, being.] A single individual reproducing without conjugation, *appl.* sporont or zygote.

- mono nuclear (môn'ôn'klêär) *a.* [Gk. *monos* single *L. nucleus* kernel.] With one nucleus only uninnuclear
- mononychous (mônôn'iklä) *a.* [Gk. *monos* single *onyx* claw] Having a single claw
- monopetalous (môn'öpët'älüs) *a.* [Gk. *monos* alone *petalon*, leaf.] Having one petal only having petals united all round of gamopetalous.
- monophagous (mônöf'ägüs) *a.* [Gk. *monos* alone *phagō* to eat.] Sustaining on one kind of food *appl* Sporozoa living permanently in a single cell *appl* caterpillars feeding on plants of one genus only of stenophagous *appl* insects restricted to one species or variety of food plant of oligophagous.
- monophasic (môn'ölä'zik) *a.* [Gk. *monos* alone *phainō* to appear] *Appl* condensed life cycle of some trypanosomes, lacking the active stage of diphasic.
- monophyletic (môn'ölik'ik) *a.* [Gk. *monos* alone *phylē* tribe.] Derived from single common parent form of oligophyletic, polyphyletic.
- monophyllous (môn'öll'üs) *a.* [Gk. *monos* alone *phyllon* leaf] Having one leaf only unifoliate having one-piece calyx.
- monophyodont (môn'öf'ödönt) *a.* [Gk. *monos* alone *physis*, to produce *odous* tooth] Having only one set of teeth the milk dentition being absorbed in foetal life or absent altogether
- monoplastic (môn'öpläs'ik) *a.* [Gk. *monos* alone *platē* flat plate.] With one plate only of any kind
- monoplastic (môn'öpläk'älä) *n.* [Gk. *monos* alone *platē* flat plate] A single-layered placula.
- monoplanetic (môn'öplänët'ik) *a.* [Gk. *monos* alone *planetes* wanderer] With one stage of motility in life-history *appl* for motion of zoospores in certain fungi *appl* diplanetic monoplanetary
- monoplanetism (môn'öplän'etizm) *n.* [Gk. *monos* alone *planetes* wanderer] Condition of having one period of motility in one life history as of oospores in some fungi.
- monoplastic (môn'öpläs'ik) *a.* [Gk. *monos* alone; *plastar* formed.] Persisting in one form
- monoploid (môn'öploid) *a.* [Gk. *monos* alone *haplos* simple side form.] Having one set of chromosomes true haploid in polyploid series, having the basic haploid chromosome number *n*. A monoploid organism.
- monoploic, haploic, *q.v.*
- monopodial (môn'öpö'dial) *a.* [Gk. *monos* alone *podē* foot.] Branching from one primary axis acropetally
- monopodium (môn'öpö'diöm) *n.* [Gk. *monos* alone *podē* foot.] A single main or primary axis from which all main lateral branches develop, as in pine.
- monopolar, unipolar *q.v.*
- monopyrenous (môn'pirē'üs) *a.* [Gk. *monos* alone *pyren* kernel] Single-stoned as a fruit.
- monorchic (mônöör'ik) *a.* [Gk. *monos* single *orchis* testis.] Having one testis.
- monorhinal (môn'ör'näl) *a.* [Gk. *monos* alone *rhis* nose.] Having only one nostril as Cyclostomata *perit* one nostril
- monosepalous (môn'ösep'älüs) *a.* [Gk. *monos* alone *F sepals* sepal.] Having a single sepal having all sepals united into one of gamosepalous.
- monosiphous (môn'ösilön'ik) *a.* [Gk. *monos* alone *siphon* tube.] Having tubes of hydrocaulus distinct from one another as in certain hydromedusa having single central tube in filament as in certain algae monosiphonous.
- monosome (môn'ösön) *n.* [Gk. *monos* alone *soma* body] The unpaired accessory or X-chromosome.
- monosomic (môn'ösö'mik) *a.* [Gk. *monos* alone *soma* body] Diploid with one chromosome missing

monoasperm us (môn aspér'mús) *n*. [Gk. *monos* single *asperm* seed.] One-seeded monospermate.

monoasperm y (môn aspér mál) [Gk. *monos* singl *asperm* seed.] Normal fertilization by entrance of one sperm only into an ovum.

monospondyli (môn'spôndí'lik) [Gk. *monos* alone *spondyles* vertebra.] *Appl.* vertebra without intercentra.

monosporangium (môn'spôrân'jüm) *n*. [Gk. *monos* alone *spora* seed *angium*, vessel.] A sporangium producing simple spores.

monospor (môn'spôr) *n*. [Gk. *monos* alone *spora* seed.] A simple or undivided spore.

monosporous (môn'spôrús, môn'spôrús) *a*. [Gk. *monos* alone *spora* seed.] Having only one spore or simple spore.

monostachyous (môn'stákh'ius) *a*. [Gk. *monos* alone *stachys* com-ear.] With only one spike.

monostel (môn'stél's) *n*. [Gk. *monos* alone *stela* column.] An axis stele when only one is the direct continuation of pterome.

monostelic (môn'stél'ik) *a*. [Gk. *monos* alone *stela* column.] Having single stele or central cylinder running through whole axis.

monostigmatic (môn'stérígmát'ik) *a*. [Gk. *monos* alone *stigma*, support.] Having single stigma *appl.* fungi.

monostichous (môn'stíkh'ius) *a*. [Gk. *monos* single *stichos* row.] Arranged in one row along one side of an axis.

monostigmatous (môn'stíg'mátús) *a*. [Gk. *monos* single *stigma* mark.] With one stigma only.

monostylous (môn'stíl'ius) *a*. [Gk. *monos* alone *stylos* pillar.] Having one style only.

monosy (môn'sel) *n*. [Gk. *monos* alone.] Separation of parts normally fused.

monosymmetrical (môn'sémét'rikál) *a*. [Gk. *monos* alone; *symmetria*, due proportion.] Having only one plane of bilateral symmetry xygotomorphic.

mothalam us (môn'thál'ámús) *a*. [Gk. *monos* single *thalamus* chamber.] Unicellular single chambered monothalamic; *appl.* fruits formed from single flowers having one gynoecium *appl.* galls; *appl.* shells of foraminifera and other protozoa.

monothecal (môn'thél'ikál) *a*. [Gk. *monos* alone *theca* box.] Having one loculus single-chambered.

monothellous (môn'thél'ius) *a*. [Gk. *monos* alone *thely*, female.] *Appl.* a female consorting with more than one male.

monotocus (mônót'ókús) *a*. [Gk. *monos* single; *tokos* offspring.] Uniparous, having one offspring at birth monocarpic, *qv*.

monotrichous (mônót'ríkh'ius) *a*. [Gk. *monos* single *trichos* hair.] Having only one flagellum at one pole monotrichic, monotrichate.

monotrochous (mônót'ríkh'ius) *a*. [Gk. *monos* alone *trochos* wheel.] Having a single-piece trochanter as in most stinging Hymenoptera.

monotr phi (môn'otr'fík) *a*. [Gk. *monos* alone *trepho* nourishment.] Sustaining on one kind of food.

monotyp (môn'ótíp) *n*. [Gk. *monos* alone *typos* type.] Single type which constitutes species or genus unique holotype.

monotype (môn'ótíp'ik) *a*. [Gk. *monos* alone *typos* type.] Part monotype having only one species, *appl.* genus having no subspecies, *appl.* species haplotypic, *appl.* polytypic.

monoxen us (môn'ôxén'ús) *a*. [Gk. *monos* alone *zenos* host.] Inhabiting one host only *appl.* parasites of heteroxenous.

monoxyl (môn'ôx'ík) *a*. [Gk. *monos* alone *xylon*, wood.] Having wood formed as continuous ring *appl.* stems.

monoxol (môn'ôx'ík) *a*. [Gk. *monos* alone *zoos*, animal.] Producing one sporozoite only *appl.* archisporozoids forming only one sporozoite on liberation from cyst.



**monoxygotic** (mōn ɔɪɡɪt'ɪk) *n* [Gk. *monos* alone *sygates* yoked] Developing from one fertilized ovum as identical twins monoxygous; uniovular

**Monro, foramen** *f* [*A. Monro* Scottish anatomist]. The interventricular foramen.

**mons pubis**,—prominence due to subcutaneous fatty tissue in front of symphysis pubis *mons Veneris*.

**Montgomery glands** [*H. F. Montgomery* Irish physician]. Areolar glands of nipple prominent during lactation.

**monticolous** (mōntɪk'ʊləs) *a*. [L. *mons* mountain *colere* to inhabit.] Inhabiting mountainous regions.

**monticulus** (mōntɪk'ʊləs) *n*. [L. *dim. mons* mountain] Largest part of superior vermis of cerebellum.

**mores** (mōriz) *n. pl.* [L. *moris* wont.] Groups of organisms preferring the same habitat, having the same reproductive season, and agreeing in their general reactions to the physical environment.

**morphallaxis** (mōrfəl'aksɪs) *n*. [Gk. *morphe* form *allaxis* changing] Transformation of one part into another in regeneration of parts *appt* epimorphosis gradual growth or development into a particular form.

**morphogenesis** (mōrfɔjən'ēsis) *n*. [Gk. *morphe* form *genesis* descent.] Origin and development of organs or parts of organisms.

**morphogenetic** (mōrfɔjən'tɪk) *a*. [Gk. *morphe* form *genesis* descent.] Pert. morphogenesis *appt* internal secretions which influence growth and striction of organs or organisms.

**morphogens** (mōrfɔjən) *n. pl.* [Gk. *morphe* form *genesis* to produce.] Substances interacting in presence of an evocator and determining the pattern of embryonic development.

**morphologic index**,—ratio expressing relation of trunk to limbs.

**morphology** (mōrfɔl'ɔʃi) *n*. [Gk. *morphe* form, *logos* discourse] The science of form and structure

of plants and animals, as distinct from consideration of functions.

**morphon** (mōrf'ɔn) *n*. [Gk. *morphe* form *on* being] A definitely formed individual *appt* a bion.

**morphoplasma** (mōrfɔplāzm) *n* [Gk. *morphe* form *plasma* formation.] Formative protoplasm kinoplasma.

**morphoplasmy** (mōrfɔplāz'i) *n*. [Gk. *morphe* form *plasma* to mould.] Formative potentiality of growing organism.

**morphosis** (mōrf'ɔsɪs, mōrf'ɔʃɪs) *n*. [Gk. *morphe* form.] The manner of development of part or organism.

**morphotic** (mōrf'ɔtɪk) *a*. [Gk. *morphe* form.] Tissue-building

**morphotype** (mōrf'ɔtɪp) *n* [Gk. *morphe* form *typos* pattern.] Type specimen of one of the forms of polymorphic species.

**morula** (mōr'ʊlə) *n*. [L. *morion* mulberry] A solid cellular globular mass, the first result of ovum segmentation stage in development preceding gastrula a globular aggregation of developing male gametes, a sperm morula.

**morulation** (mōr'ʊləshən) *n* [L. *morion* mulberry] Morula formation by segmentation.

**morulit** (mōr'ʊlɪt) *n*. [L. *morion* mulberry] Nucleolus or karyosom

**mosaic** (mōzā'ɪk) *n*. [It. *mosaico*, mosaic] Hybrid having unblended parental allelomorphous characters *chimaera* virus disease of plants *appt* theory that each ommatidium in compound eye of arthropods receives portion of an image, the several portions being integrated as the total image by the brain.

**moose-fibres**,—nerve fibres branching around cells of internal layer of cerebellar cortex.

**moosey cells**,—protoplasmic astrocytes.

**motoneuron** (mōt'ɔnʊr'ō) *n*. [L. *moovere* to move Gk. *neurion* nerve.] A motor neurone, *g.s.*

**motor** (mōt'ɔ) *a*. [L. *moovere* to move.] Pert. or connected with movement *appt* nerves, etc.

motor are a,—areas of brain where motion is correlated.

motor d-organ,—terminal ramification of axis-cylinder in striated muscle—less correctly end plate.

motor neurones,—nerve cells concerned in regulation of movement.

motor oculi,—the third cranial nerve.

motor unit,—a motor neurone and associated muscle fibres.

motor m (mōtō'rīsm) [L. *movetur* to move.] Motor areas part of nervous system where motorial sense is localized.

moult (mōlt) [L. *mutare* to change.] To cast or shed periodically the outer covering whether of feathers, hair skin, or horns. *s.* The process of shedding ecdysis.

moulting glands,—ecdysial glands, *s.* moulting hormone,—secreted by ecdysial glands or cells in dorsal region of protocerebrum, in Arthropoda.

mouth part,—a head appendage of arthropods

M-rays,—mitogenetic rays

mucil (mū'shī'k) *s.* [L. *mucus* mucus *facit* to make.] Mucus-secreting

muciform (mū'shī'fōrm) *s.* [L. *mucus* mucus *formis*, shape.] Resembling mucus

mucilage (mū'shī'jēn) *s.* [L. *mucus* mucus Gk. *genna* producing] The substance of granules in cells of mucous membrane mucinogen.

mucilag (mū'shī'jē) *s.* [L. *mucus* mucus.] A substance of varying composition, hard when dry swelling and slimy when moist, produced in cell-walls of certain plants.

mucilaginous (mū'shī'jēnūs) *s.* [L. *mucus* mucus.] *Peri.* containing resembling or composed of mucilage *appt.* certain glands of joints *appt.* cells, ducts, canals slits.

mucin (mū'shīn) *s.* [L. *mucus* mucus] A glycoprotein of mucus, occurring in or secreted by certain cells and glands.

mucino (mū'shīn'ōyēn) *s.* [L. *mucus* mucus Gk. *genna* pro-

ducing] A substance producing mucus occurring in granules of mucous gland cells.

muciparous (mū'shī'pārūs) [L. *mucus* mucus *parere* to beget.]

Mucus-secreting

mucocellulos (mū'shī'sē'lōs) *s.* [L. *mucus* mucus *cellula*, small cell.] Cellulose mixed with mucous substance as in some seeds and fruits.

mucocutaneous (mū'shī'kūtēnūs) *s.*

mucodermal (mū'shī'kōdēr'māl) *s.* [L. *mucus* mucus *cutis* skin Gk. *derma* skin] *Peri.* skin and mucous membrane.

mucoid (mū'shī'kōid) [L. *mucus* mucus Gk. *eidos* like.] *Peri.* caused by mucus or mucilage *appt.* degeneration, tissue. A

mucoprotein of cartilage bone tendon, etc.

mucoproteins (mū'shī'kōprō'tēinz) *s.* *plur.* [L. *mucus* mucus Gk. *protein* first.] Compounds of protein with a carbohydrate, include mucins and mucoids glycoproteins or glycoproteins.

mucosa (mū'shī'kōsā) *s.* [L. *mucus* mucus.] A mucous membrane.

mucoserous (mū'shī'kōsērūs) *s.* [L. *mucus* mucus *serosus* whey.] Secreting mucus and body fluid.

mucous (mū'shī'kōs) *s.* [L. *mucus* mucus.] Secreting containing or *peri.* mucus *appt.* glands membranes, sheaths, tissue.

macro (mū'shī'krō) *s.* [L. *makros* sharp point.] A stiff or sharp point abruptly terminating an organ small even pointed keel sterile third carpel as in pine, posterior tip of cuticle-bone a projection below orifice in Polyzoa.

macronate (mū'shī'krōnāt) *s.* [L. *macro* sharp point.] Abruptly terminated by sharp spine macroniferous.

macronate (mū'shī'krōnāt) [L. *macro* sharp point.] Tipped with small macro.

macronal (mū'shī'krōnāl) *s.* [L. *macro* sharp point.] A small macro.

muculent (mū'shī'kulēnt) *s.* [L. *mucus* mucus.] Mucoid containing mucus mucilaginous.

- mucus** (mŭ'kŭs) *n.* [*L. mucus* mucus.] The slimy glairy substance secreted by goblet cells of a mucous membrane or by mucous cells of a gland.
- mulberry body**—*morula*, *q.v.*
- Müllerian bodies** [*F Müller* German naturalist]. Structures containing albuminous and oily substances in trichilium eaten by tropical ants.
- Müllerian ducts** [*J Müller* German anatomist]. Ducts arising on lateral aspects of Wolffian ducts.
- Müllerian minence** [*J Müller* German anatomist]. A colliculus or elevation of ventral part of cloaca at entrance of Müllerian ducts and between openings of Wolffian ducts.
- Müller's fibres** [*H Müller* German anatomist]. Neuroglial fibres forming framework supporting nervous layers of retina sustentacular or radial fibres of Müller.
- Müller' larva** [*J Müller* German zoologist]. Ciliated larva of Polycladida.
- Müller's muscle** [*H Müller* German anatomist]. A plain muscle across inferior orbital fissure a plain muscle of eyelids.
- multangular** (mŭl'ting'gŭlär) *a.* [*L. multus* many *angulus* angle.] *Appl* two carpal bones greater and lesser multangulum respectively trapezium and trapezoid.
- multarticulate** (mŭl'tär'tik ällät) *a.* [*L. multus* many *articulus* joint.] With many articulations many joined polyarthric.
- multicamerata** (mŭl'tikäm ärtät) *a.* [*L. multus* many *camera* chamber.] Multilocular with many chambers.
- multicapsular** (mŭl'tikäp'sŭlär) *a.* [*L. multus* many *capsula*, little chest.] With many capsules.
- multicarinat** (mŭl'tikär'lnät) [*L. multus* many *carina* keel] Having many carinae or ridges.
- multicellular** (mŭl'tisel'ŭlär) *a.* [*L. multus* many *cella* cell.] Many celled consisting of more than one cell.
- multicentral** (mŭl'tisen'träl) *a.* [*L. multus* many *entrum* centre.]
- With more than one centre of growth or development.
- multiciliate** (mŭl'tisel'tät) *n.* [*L. multus* many *cilium* eyelid.] With some or many cilia.
- multicapital** (mŭl'tisäp'täl) *a.* [*L. multus* many; *caput* head.] With many heads or branches arising from one point.
- multicostate** (mŭl'tikŭstät) *a.* [*L. multus* many *costa* rib] With many ribs or veins with many ridges.
- multicuspid** (mŭl'tikŭs'pid) *a.* [*L. multus* many *cuspis* spear head.] With several cusps or tubercles *appl* molar teeth.
- multidentate** (mŭl'tiden'tät) *a.* [*L. multus* many *dens* tooth.] With many teeth or indentations.
- multidigitate** (mŭl'tidij'tät) *a.* [*L. multus* many *digitus* finger] Many-fingered.
- multifactorial** (mŭl'tifäktŕ'ryäl) *a.* [*L. multus* many *factor* to make.] Part or controlled by a number of genes polygenic.
- multifid** (mŭl'tifid) *a.* [*L. multus* many *findere* to cleave.] Having many clefts or divisions.
- multiflagellate** (mŭl'tifäl'ŭlät) *a.* [*L. multus* many *flagellum* whip.] Fringed with several or many flagella polymastigote, *q.v.*
- multiflorous** (mŭl'tiflŕ'sŭs) *a.* [*L. multus* many *flor* flower] Bearing many flowers.
- multifoliate** (mŭl'tifŭlät) *a.* [*L. multus* many *folium* leaf.] With many leaves.
- multifoliate late** (mŭl'tifŭl'läät) *a.* [*L. multus* many *foliolum* small leaf] With many leaflets.
- multiganglionate** (mŭl'tigäng'gŭlŭntät) *a.* [*L. multus* many *Gk. ganglion* small tumour] With several or many ganglia.
- multigyral** (mŭl'tijŕ'äl) *a.* [*L. multus* many *gyrus* circle.] With many gyri tortuous.
- multijug** (mŭl'tjoog'ät) *a.* [*L. multus* many *jugum* yoke.] Having many pairs of leaflets.

multil cunar (mũl'ulákũ nár)

[L. *multus* many *lacuna* cavity]

With many lacunae having number of leaf-gaps *appl.* nodes.

multilaminar (mũl'tlám'lní) a. [L.

*multus* many *lamina*, plate.] Composed of several or many laminae.

multilobate (mũl'tlób'bat) a. [L.

*multus* many *lobus* lobe.] Composed of many lobes multilobar

multil bulate (mũl'tlób'blít) a. [L.

*multus* many *lobulus* small lobe.] Having many lobules.

multilocular (mũl'tlók'ólár) a. [L.

*multus* many *loculus* compartment.] Having many cells or chambers.

multinervate (mũl'tinér'vát) a. [L.

*multus* many *nervus* nerve.] With many nerves or nervures.

multinodal (mũl'tinób'dál) a. [L.

*multus* many *nodus* knot.] With many nodes multinodate.

multinomial (mũl'tinób'mlí) a. [L.

*multus* many *nomen* name.] *Appl.* name or designation composed of several names or terms

of binomial trinomial.

multin cleate (mũl'tinób'klít) a. [L.

*multus* many *nucleus* kernel.] With several or many nuclei poly-

karye.

multin cleolate (mũl'tinób'ólít) a. [L.

*multus* many *nucleolus* small kernel.] With more than one nucleolus.

multiovalate (mũl'tób'vít) a. [L.

*multus* many; *ovum*, egg.] With several or many ovules.

multiparous (mũl'tpár'árs) a. [L.

*multus* many *pari* to bear.] Bearing several, or more than one

at birth developing several or many lateral axes.

multipl corolla,—a corolla with two

or more whorls of petals.

multipl diplóid,—allopolyploid, *g.*

multipl factors,—genes having joint or cumulative effect.

multipl fissíon,—repeated division

division into large number of parts or spores.

multiplar (mũl'tpór'ár) a. [L. *mul-*

*tus* many *polus* axis-end.] *Appl.*

nerve-cells with more than two axi-cylinder processes involving more than two poles *appl.* mitoses, usually pathological.

multiradial (mũl'tirádít) a. [L.

*multus* many *radius* ray] Many-rayed.

multiramose (mũl'tirámó) a. [L.

*multus* many; *ramus* branch.] Much branched.

multiseptate (mũl'tisép'ít) a. [L.

*multus* many *septum* partition.] Having numerous partitions.

multiserial (mũl'tisér'íál) a. [L.

*multus* many *series* row] Arranged in many rows multi-

scríate *appl.* xylem rays.

multispiral (mũl'tispír'ál) a. [L.

*multus* many *spira*, coil.] With many coils or whorls.

multistaminate (mũl'tistám'ínít)

a. [L. *multus* many *stamen* thread] Having several or many stamens.

multisulcate (mũl'tisól'kít) a. [L.

*multus* many *sulcus* furrow] Much furrowed.

multitentaculate (mũl'ténták'ólít)

a. [L. *multus* many *tentaculum* feeler] Having many tentacles.

multituberculat (mũl'ttübér'kít)

a. [L. *multus* many *tuberculum* small bump.] Having several or many small prominences.

multituberculy (mũl'ttübér'kúl)

a. [L. *multus* many *tuberculum* small bump.] The theory that

molar teeth are derived from forms with a number of tubercles.

multivalve (mũl'tiválv) a. [L.

*multus* many *valvus* folding doors.] A shell composed of more

valves or pieces than two.

multivincular (mũl'tvínv'kúlár) a.

[L. *multus* many *vinculum* fetter] *Appl.* hinge of bivalve

shell with several ligaments.

multivoltine (mũl'tvóltín) a. [L.

*multus* many lt. *voluta*, turn.] Having more than one brood in

year *appl.* silkworms.

multocular (mũl'tók'ólár) a. [L.

*multus* many *oculus* eye.] Many eyed.

multungulate (mũltũng'gũlũ) *n*. [*L. multus* many *ungula* hoof] Having the hoof in more than two parts.

mune (mũn) *n*. [*L. munus* function.] A group of organisms with a characteristic behaviour response motor, *q.v.*

muricate (mũ rikũt) *a*. [*L. muricatus* full of sharp points.] Formed with sharp points covered with short sharp prickles.

muriform (mũ rifũrm) *a*. [*L. murus* wall *forma* shape.] Like a brick wall *appl.* a parenchyma so arranged, occurring in medullary rays of dicotyledons and in corky formations *appl.* arrangement of germinating spores.

muscicola (mũsk'ũlũ) *a*. [*L. musculus* mouse *colere* to inhabit.] Living or growing among or on mosses muscicolous.

muscle (mũsũl) *n*. [*L. musculus* muscle.] A mass of contractile fibres with motorial function fleshy part of body composed of muscular tissue.

muscle baan ra,—folds or plaits of mesogloea sicular aspects of anthozoan mesenteries, supporting retractor muscles.

muscle-spindle—a sensory structure in muscle, consisting of spindle-shaped connective tissue sheath containing small modified fibres and sensory nerve endings

musoid (mũs'kũd) *a*. [*L. muscus* mouse (Gk. *oides* form)] Mouse-like rooney mucous

muscular (mũs'kũlũr) *a*. [*L. musculus* muscle.] Pert or consisting of muscle *appl.* sense excitability fibres, tissue process triangle stomach etc.

musculature (mũs'kũlũtũr) *n*. [*L. musculus* muscle.] The system or arrangement of muscles as whole.

musculocutaneous (mũs'kũlũkũtũ nũsũ) *a*. [*L. musculus* muscle *cutis* skin.] Pert. muscles and skin *appl.* limb veins and nerves supplying muscles and skin.

musculophr nlc (mũs'kũlũfrũ'nlũ) *a*. [*L. muscularis* muscle Gk. *phron* midriff.] Supplying diaphragm and body wall muscles *appl.* an artery

musculospiral (mũs'kũlũspũ'rũlũ) *a*. [*L. muscularis* muscle *spira* coil.] *Appl.* radial nerve which passes spirally down humerus.

mushroom bodies,—corpora pedunculata or pedunculate bodies, *q.v.*

mushroom gland,—th seminal vesicles of certain insects as cock roaches.

mutafacient (mũtũfũ'sũtũr -ũblũtũ) *a*. [*L. mutare* to change *facere* to make.] Inducing or aiding the creation of a mutation mutagenic.

mutant (mũ'tũntũ) *n*. [*L. mutare* to change.] An individual with transmissible characteristics different from those of the parent form.

Exhibiting mutation

mutation (mũtũ'shũnũ) *n*. [*L. mutare* to change] Gradual variation towards a definite change of structure successional species or subspecies a salutation o discontinuous variation theory of De Vries that new forms, differing sufficiently to constitute a new variety arise spontaneously and remain true.

muticous (mũ'tũkũsũ) *a*. [*L. muticus* maimed.] Without defensive structures, as clawless, toothless, blunt.

mutilation (mũ'tũlũ'shũnũ) *n*. [*L. mutare* to maim.] Loss of an essential part of structure amputation.

mutualism (mũ'tũlũ'ũzũmũ) *n*. [*L. mutare* exchanged] A form of symbiosis in which both parties derive advantage without sustaining injury

myarian (mũlũ'rũnũ) *a*. [Gk. *mys* muscle] *Appl.* classification according to musculature

mycelioid (mũ'sũ'kũlũdũ) *a*. [Gk. *mycelis* fungus *oides* form] Like mycelium.

mycell in (mũ'sũ'lũ'mũ) *n*. [Gk. *mycelis* fungus.] Network of filamentous cells or hyphae forming typical vegetative structure of fungi mycelic spawn, as of mushroom.

- mycocyte** (mīk'ōtīt) *n.* [Gk. *mykes* fungus *kytes* hollow] One of follicle-cells at posterior oocyte pole through which the egg of Aphides is infected by symbionts.
- mycotog neti** (mīk'ōtōjēnē'tīk) *n.* [Gk. *mykes* fungus; *genesis* de scent.] Produced by fungus; mycotogenic.
- mycotoid** (mīk'ōtōid) *n.* [Gk. *mykes* fungus, *oides* form.] Fungoid; fungus-like.
- mycology** —mycology *g.s.*
- mycotoma** (mīk'ōtōmā) *n.* [Gk. *mykes* fungus.] The mycotocytes collectively.
- mycophagous** (mīk'ōf'igūs) *n.* [Gk. *mykes* fungus *phagēin* to eat.] Feeding on fungi fungi-vorous.
- mycoderm** (mīk'ōdērm) *n.* [Gk. *mykes* fungus *derma*, skin.] A bacterial film during alcoholic fermentation.
- mycology** (mīk'ōl'ōjī) *n.* [Gk. *mykes* fungus *logos* discourse.] That part of botany which deals with fungi mycology.
- mycoplasma** (mīk'ōplāzm) *n.* [Gk. *mykes* fungus *plasma*, form.] A parasitic substance of cereal seeds, giving rise to rust fungus.
- mycoprasma** (mīk'ōprēm nā) *n.* [Gk. *mykes* fungus; *prasma* stem.] A rhizome containing symbiotic fungi as in some orchids.
- mycorrhiza** (mīk'ōr'īzā) *n.* [Gk. *mykes* fungus *rhiza*, root.] Association of fungal mycelium with roots of higher plant mycorrhiza.
- mycorrhizic** (mīk'ōr'īzīk) *n.* [Gk. *mykes* fungus *rhiza*, root.] Exhibiting the features of mycorrhiza partially symbiotic mycorrhizic.
- mycosterol** (mīk'ōstēr'ōl) *n.* *ph.* [Gk. *mykes* fungus *stereos* solid *ol*, *derma* oil.] Sterols from cryptogams, especially fungi, as ergosterol, fucosterol, symosterol etc. *s.* phytosterols.
- mycotroph** (mīk'ōtēr'ōf'īk) *n.* [Gk. *mykes* fungus *trophē* nourish-

- ment.] *Appl.* plants living symbiotically with fungi.
- myel cephal** *n.* (mī'ēl'kēf'ālōn, -ēf) *n.* [Gk. *myeles* marrow; *myelēphalos* brain.] The posterior part of hind-brain, comprising medulla oblongata and lower part of fourth ventricle after-brain.
- myella** (mī'ēlā) *n.* [Gk. *myeles* marrow] A highly refracting fatty material forming medullary sheath of nerve fibres.
- myelination** (mī'ēlīn'āshōn) *n.* [Gk. *myeles* marrow] Acquisition of medullary sheath myelination.
- myel blast** (mī'ēlōblāst) *n.* [Gk. *myeles* marrow; *blastos* bud.] An undifferentiated non-granular lymphoid cell of bone marrow lymphomyelocyte.
- myelocoel** (mī'ēlōcēl) *n.* [Gk. *myeles* marrow *koēlos* hollow] The spinal cord canal.
- myelocyte** (mī'ēlōtīt) *n.* [Gk. *myeles* marrow *kyte* hollow] An amoeboid cell of bone marrow.
- myeloid** (mī'ēlōid) *n.* [Gk. *myeles* marrow *oides* form.] Like marrow in appearance or structure *appl.* cells, as megakaryocytes, monocytes, and parenchymal cells resembling myelin, *appl.* granules at base of retinal pigment cells.
- myelomere** (mī'ēlōmēr) *n.* [Gk. *myeles* marrow *meros* part.] A segment of the spinal cord.
- myelon** (mī'ēlōn) *n.* [Gk. *myeles* marrow] Spinal cord of Vertebrates.
- myeloplast** (mī'ēlōplāst) *n.* [Gk. *myeles* marrow *plastēs* formed] A leucocyte of bone marrow.
- myeloplax** (mī'ēlōplāks) [Gk. *myeles* marrow *plax* something flat.] A giant-cell of marrow and blood-forming organs megakaryocyte and osteoclast.
- myenteric** (mī'ēntēr'īk) *n.* [Gk. *mys* muscle *enteron* gut.] *Appl.* nerve plexus controlling movement of food towards anus, Auerbach's plexus *appl.* reflex.
- myiasis** (mī'yās'īs) *n.* [Gk. *myia* fly] The invasion of living tissues by larvae of Diptera.

- mylohyoid** (mí'lóhí'oid) *a.* [Gk. *mylo* mill *hyoides* T shaped.] In the region of hyoid bone and posterior part of mandible *appl.* artery groove muscle nerve.
- myalbumin** (mí'álbú mín) *n* [Gk. *mys* muscle *L. albumen*, whit of egg] An albumin product of muscle.
- myoblast** (mí'óbíást) *n.* [Gk. *mys* muscle *blastos* bud.] A cell which develops into muscle fibre.
- myocardium** (mí'ókár'díum) *n* [Gk. *mys* muscle *kardia*, heart.] The muscular walls of the heart.
- myochrome** (mí'ókrom) *n* [Gk. *my* muscle *chromos* colour] Any muscle pigment.
- myocoele** (mí'oeál) *n* [Gk. *mys* muscle *koeles* hollow] Part of the coelom enclosed in a myotome.
- myocomma** (mí'ókóm á) *n.* [Gk. *mys* muscle *komos* clause.] A myoseptum or ligamentous connection between successive myomeres.
- myocyte** (mí'óist) *n* [Gk. *mys* muscle *kytes* hollow] Contractile inner layer of ectoplasm of Gregarina *contractile cell* muscle cell
- myodome** (mí'odóm) *n* [Gk. *mys* muscle *dome* chamber] A chamber contains g the eye-muscles in some teleosts.
- myodynamic** (mí'ódínám'ík) *a.* [Gk. *my* muscle *dynamics* power] *Part.* muscular force or contraction.
- myoepicardial** (mí'óepíkárdíál) *a* [Gk. *my* muscle *epi* pon *keras* heart] *Appl.* mantle consisting of the mesocardium walls, destined to form the muscular and epicardial walls of the heart.
- myoepithelial** (mí'óepíthé'íál) *a* [Gk. *my* muscle *epi* upon *thale* nipple.] *Part.* muscle and epithelium *appl.* epithelium cells with contractile outgrowths, as in coelenterates *appl.* contractile cells of epithelial origin: salivary and sweat glands.
- myofibril** (mí'ófíbríí) *n* *plu* [Gk. *my* muscle *L. fibrilla*, small fibre.] Contractile fibrils of muscular tissue *myofibrils*.
- myogenic** (mí'ójén'ík) *a.* [Gk. *mys*, muscle *genesis* to produce.] Having origin in muscular cells, as heart beat.
- myoglobulin** (mí'óglób úlín) *n.* [Gk. *mys*, muscle *L. globulus* small globe.] A globulin of muscle.
- myohaematin** (mí'ohém álín) *n.* [Gk. *my* muscle *haema* blood.] A pigment of muscular tissue cytochrome *g.*
- myoid** (mí'oid) *a.* [Gk. *mys* muscle *eidos* form.] Resembling or composed of muscular fibres *appl.* striated cells or sarcoyles of thymus. *n.* Contractile proximal part or filament of rods and cones of retina.
- myolemma** (mí'ólem'á) *n.* [Gk. *mys* muscle *lemma*, skin.] The sheath of muscle fibre sarcolemma.
- myology** (mí'ólój) *n.* [Gk. *mys* muscle *logos* discourse.] The branch of anatomy dealing with muscles.
- myomere** (mí'ómér) *n* [Gk. *mys* muscle *meros* part.] A muscle-segment divided off by connective tissue insertions or myocommata.
- myometrial** (mí'ómetríál) *a.* [Gk. *my* muscle *metra* uterus.] *Part.* myometrium *appl.* glandular tissue of uterus, supposed to produce hormone affecting growth of mammary glands.
- myometrium** (mí'ómetríúm) *n* [Gk. *mys* muscle *metra* uterus.] The muscular uterine wall.
- myo** (mí'ón) *n* [Gk. *myon* muscular part.] Unit of muscle individual muscle fibres.
- myon** (mí'ón) *n* [Gk. *mye* muscle *myon* thread.] A minute contractile fibril of Protista myoneme.
- myonural** (mí'ónú rál) *a.* [Gk. *my* muscle *neuron* nerve] Neuromyal *g.*
- myonure** (mí'óú) *n* [Gk. *mys* muscle *neuron* nerve.] A motorial nerve-cell
- myonicity** (mí'ónís'ítí) *n.* [Gk. *mys*, muscle.] The contracting power of muscular tissue.

- myophan** (mí'fán) *n* [Gk. *mys* muscle *phainein* to appear] Muscle-like *appt* striations in protozoa.
- myophor** (mí'fór) *n* [Gk. *mys* muscle *phoros* to bear] A structure adapted for muscle attachment.
- myophriak** (mí'frik) *n* [Gk. *mys* muscle *phris rippí*] A myoneme or contractile element of protozoa.
- myoplasm** (mí'pázem) *n* [Gk. *mys* muscle *plasma*, mould.] Contractile portion of muscle fibre *appt* sarcoplasm.
- myopolar** (mí'pólar) *n* [Gk. *mys* muscle *pólos* axis-end.] Pert. muscular polarity.
- myoproteid** (mí'pó'téid) *n* [Gk. *mys* muscle *protes* first.] A globulin-like substance of fish muscle.
- myoseptum** (mí'sépt'um) *n* [Gk. *mys* muscle *L. septum* partition.] A myocomma, *q.v.*
- myosin** (mí'sín) *n* [Gk. *mys* muscle.] A globulin of dead muscular tissues muscle-clot.
- myotaxis** (mí'táks) *n* [Gk. *mys* muscle *axis* tension.] Muscular tension or tensity.
- myotatic** (míotá'tik) *n* [Gk. *mys* muscle *axis* tension.] Causing or *pert* myotaxis *appt* stretch reflex.
- myotix** (míot'ix) *n* [Gk. *myos* to close.] Causing or *pert* myosin or papillary contraction.
- myotome** (mí'tóm) *n* [Gk. *mys* muscle *teme* cutting] One of a series of hollow tubes formed in early vertebrate embryo muscular metamere of primitive vertebrates and segmented invertebrates.
- myotonia** (mí'tó'ná) *n* [Gk. *mys* muscle *tonos* tension.] Muscular tension or tonicity.
- myrm cocho** (mírm'kókó'rú) *n* [Gk. *myrmex* ant *chord* farm.] An oily seed modified to attract, and be spread by ants.
- myrmecology** (mírm'kékó'l'j) *n* [Gk. *myrmex* ant *logos* discourse.] The study of ants.
- myrmecophagous** (mírm'kékó'f'aghs) *n* [Gk. *myrmex* ant *phagis* to eat] Ant-eating.

- myrmecophile** (mírm'kékó'fil) *n* [Gk. *myrmex* ant *philes* loving] A guest insect nest of ants.
- myrmecophilous** (mírm'kékó'fíus) *n* [Gk. *myrmex* ant *phile* loving] Pollinated by agency of ants living with or preying on, or mimicking ants, *appt* epidets.
- myrmecophyte** (mírm'kékó'fit) *n* [Gk. *myrmex* ant *phyton* plant.] A myrmecophilous plant, or one that benefits from ant inhabitants and has special adaptations for housing them.
- myrosin** (mí'ró'sín) *n* [Gk. *myrmex* unguent.] Smirginase an enzyme of Cruciferae acting upon glucosides.
- myrtiform** (mírt'fírm) *n* [L. *myrtus* myrtle *forma*, shape.] *Appt* incise form.
- mystacial** (místá'siál) *n* [Gk. *mys* *stas* mustache.] *Appt* a pad of thickened skin on side of snout, and to tactile hairs or vibrissae.
- myxamoeba** (mík'sámé'bá) *n* [Gk. *myxos* slime *amoebe* change.] Mycetozoon spore in amoeboid stage.
- myxocyte** (mík'séit) *n* [Gk. *myxos* slime *cytes* hollow] Cell of mucous tissue.
- myxoflagellate** (mík'séif'eláit) *n* [Gk. *myxos* slime *L. flagellum* whip.] A flagellula or zoospore stage in mycetozoon development following myxamoeba.
- myxopodium** (mík'sópó'díum) *n* [Gk. *myxos* slime *pous* foot.] A slimy pseudopodium.
- myxopterygium**, — *myxopterygium*.
- myxosis** (mík'sís) *n* [Gk. *myxos* to suck.] Suction sucking.

## N

- nacre** (nákrá) *n*. [F *nacré* having pearly lustre.] *Appt* the thick primary wall of sieve elements.
- nacreous** (ná'kréus) *n*. [Ar *nakir* hollowed.] Yielding or resembling mother-of-pearl or nacre.



nacrino (nā'krīn) *n.* [Ar *nahr* hollowed.] Mother-of-pearl colour  
naled (nā'ād) *n.* [Gk. *nales* water nymph.] The nymph stage of hemimetabolic insects.

nail (nāl) *n.* [A.S. *naegol* nail.] Terminal horny plate of finger or toe or of beak ungula

nail bone,--terminal bone of finger or toe ungual phalanx.

naked (nā'kēd) *a.* [A.S. *naced*] Without a covering *appl* spores, seeds, et *appl* non-nuclear genes as phage or virus.

nanism (nā'nizm) *n.* [Gk. *nanos* dwarf.] Dwarfishness.

nanophanerophyte (nān'ōfān'ērōfīt) *n.* [Gk. *nanos* dwarf *phaneros* manifest *phytos* plant.] Shrub under 2 metres in height.

nanoplankt *n.* (nān'ōplāng'ktōn) *n.* [Gk. *nanos* dwarf *planktos* wandering.] Microscopic floating plant and animal organisms nanoplankton of microp plankton.

napiform (nā'pīfōrm) *a.* [L. *napus* turnip *forma* shape.] Turnip-shaped *appl* roots.

narcosis (nārkō'sis) *n.* [Gk. *narkō* numbness.] State of unconsciousness or stupor produced by drug

narcotic (nārkō'tik) *n.* [Gk. *narkō* numbness.] A drug which produces unconsciousness. *a.* *Part* or producing narcosis.

nares (nā'rits) *n. pl.* [L. *nares* nostrils.] Nostrils.

nares, anterior--openings of olfactory organ to exterior nostrils.

nares, posterior--openings of olfactory organ into pharynx or throat choanae.

nasal (nā'nāl) *a.* [L. *nares* nostrils] *Part* the nostrils *appl* septum the partition between nostrils.

naricorn (nā'rīkōrn) *n.* [L. *nares* nostrils *cornu* horn.] Terminal horny part of nostril of Turbinates nasal scale.

nariform (nā'rīfōrm) *a.* [L. *nares* nostrils *forma* shape.] Shaped like nostrils.

naris --sing of narca.

nasal (nā'zāl) *a.* [L. *nares* nose] *Part* the nose.

nasal *n.* (nā'zōn) *n.* [L. *nares* nose.] Middle point of nasofrontal suture.

Nasmyth's membrane [A. Nasmyth Scottish dentist]. Cuticula dentis, a transparent membrane over enamel of crown of a mammalian tooth.

nasos *trai* (nā'zōn'trai) *n.* [L. *nares* nose *ostium* cavity] *Part* nose and maxillary cavity

nasobuccal (nā'zōbūk'al) *a.* [L. *nares* nose *bucca* cheek.] *Part* nose and cheek *part* nose and mouth cavity

nasociliary (nā'zōsī'lī'ārī) *a.* [L. *nares* nose *cilia*, eyelashes.] *Appl* branch of ophthalmic nerve, with internal and external nasal branches, and giving off the long ciliary and other nerves.

nasofrontal (nā'zōfrōn'tāl) *a.* [L. *nares* nose *frons* forehead.] *Appl* part of superior ophthalmic vein which communicates with the angular vein.

nasolabial (nā'zōlā'bīāl) *a.* [L. *nares* nose *labium* lip.] *Part* nose and lip *appl* muscle *appl* groove and glands in Plerhodontidae.

nasolacrimal (nā'zōlāk'rīmāl) *a.* [L. *nares* nose *lacrima* tear] *Appl* duct from lacrimal sac to inferior meatus of nose.

nasomaxillary (nā'zōmāk'sī'lī'ārī) *a.* [L. *nares* nose *maxilla* jaw] *Part* nose and upper jaw

naso-optic (nā'zōōp'tik) *a.* [L. *nares* nose Gk. *optikos* relating to sight] *Appl* an embryonic groove between nasal and maxillary processes.

nasopalatin (nā'zōpāl'ātīn) *a.* [L. *nares* nose *palatus* palate.] *Part* nose and palate. *Appl* groove of outer recess in nasal septum, nerve canal communicating with olfactory organ nasopalatal.

nasopharyngeal (nā'zōfārīng'eāl) *a.* [L. *nares* nose Gk. *pharynx* gullet.] *Part* nose and pharynx or nasopharynx.

nas pharynx (nā'zōfārīng'is) *n.* [L. *nares* nose Gk. *pharynx* gullet.]

That part of pharynx continuous with posterior nares rhinopharynx.  
nasoturbinal (nā zōt'ūr'bīnāl) *n.* [L. *nasus* nose *turbo* whirl.] *Appl.* outgrowths from lateral wall of nasal cavity increasing area of sensory surface.

nasti (nās'tik) *n.* [Gk. *nastes* pressed close.] *Appl.* plant movements caused by diffuse stimuli as chemo- photo- nycti transmuta- seasonality

nasus (nā zōs) *n.* [L. *nasus* nose.]  
Nose clypeus of insect head.

nasute (nās'ūt) *n.* [L. *nasutus* large-nosed.] *Appl.* a soldier termite with rostrum nasute.

natal (nā'tāl) *n.* [L. *natus* buttocks.]  
*Peri.* the buttocks.

natalty (nātāl'tē) *n.* [L. *natalis* *per.* birth.] Birth-rate.

natant (nātānt) *n.* [L. *natus* to swim.] Floating on water surface.

natatorial (nātā'tōr'āl) natatory (nātātōrē) *n.* [L. *natus* to swim.] Formed or adapted for swimming

nativ (nā'tē) *n.* [L. *natus* born.] *Appl.* animals and plants which originated in district or area in which they live.

natural selection,—processes occurring in Nature which result in survival of fittest and elimination of individuals less well adapted to their environment.

nature (nā'tūr) *n.* [L. *natura*, nature.] Sum-total of inheritance, *opp.* nurture or environment.

nauplius (nō plūs) *n.* [L. *nauplius* shell-fish.] The earliest larval stage of crustacean crustaceans and certain shrimp.

nautiliform (nō'til'fōrm) *n.* [L. *nautilus* *for.* nautilus *forma*, shape.] Shaped like nautilus shell nautiloid.

navel (nā vēl) [A.S. *nafela* navel.] Place of attachment of umbilical cord to body of embryo umbilicus.

navicular (nāvīk'ulār) *n.* [L. *navis* *dim.* ship.] Boat-shaped scaphoid.

naviculare (nāvīk'ulārē) *n.* [L. *navis* *dim.* ship.] The scaphoid radials of mammalian carpus tarsal bone between talus and cuneiform bones.

N-discs,—discs or band on either side of Z-disc.

naia,—van na, *g.s.* of insect wing  
nealogy (nēāl'ōjē) *n.* [Gk. *nealos* youthful *logos* discourse.] The study of young animals.

neanic (nēān'ik) *n.* [Gk. *neanikos* youthful.] Adolescent *appl.* larval phase preceding that of adult form.

naecti (nā'ēktē) *n.* [Gk. *neos* new *Aktis* Great Bear] *Appl.* or *per.* zoogeographical region or sub-region of the holarctic region, comprising Greenland and North America, and including northern Mexico.

n b kern (nā'bēnkērn) *n.* [Ger. *nahe*, near *Kern*, nucleus.] Paraneuron, *g.s.*

n benkörper (nā'bēnkē'r'pēr) *n.* [Ger. *nahe*, near *Körper* body] A body surrounded by oil-drops at inner pole, of Pyrodinium.

neobiosis (nēō'bīō'sis) *n.* [Gk. *neobios* dead *bios* manner of life.] The activity of cells after death of an organism continuance of certain vital functions after disorganization of cell.

nerogenous (nēkrōj'ēntē) *n.* [Gk. *neobios* dead *gēnes* offspring] Living or developing in dead bodies.

ecr hormone (nēkrōbōrmōn) *n.* [Gk. *neobios* dead *hormōn* to excite] Substance in tissue extracts or dead cells which may either kill living cells or induce mitosis.

nerophagous (nēkrōf'agōs) necrophilous (nēkrōf'īlōs) *n.* [Gk. *neobios* dead *phagōs*, to eat *phileōs* to love] Feeding on dead bodies.

nectar (nēk'tār) *n.* [Gk. *nektar* nectar] Sweet substance secreted by special glands, nectaries in flowers and in certain leaves.

nectar grid *n.*—series of markings on petals of flowers, aiding insects in finding nectar and at same time facilitating cross-fertilization.

nectariferous (nēk'tārīf'ērōs) *n.* [L. *nektar* nectar *ferre* to carry] Producing nectar or having nectar secreting structures.

- nectarivorous (nĕk'tārīv'orūs) *n.* [L. *nectar* nectar *vorare* to devour] Nectar-sipping *appl* certain insects.
- nectary (nĕk'tārī) *n.* [Gk. *nectar* nectar] A group of modified sub-epidermal cells of no definite position in a flower less commonly in leaves, secreting nectar nectar gland.
- nectocalyx (nĕk'tōkāl'iks) *n.* [Gk. *nectas* swimming *kalyx* cup.] A modified medusiform person adapted for swimming purposes found as part of siphonophore colony.
- nectocyst (nĕk'tōkist) *n.* [Gk. *nectas* swimming *kystis* bladder] The cavity of a nectocalyx nectonic.
- nectomonad (nĕk'tōmōn'ād) *n.* [Gk. *nectas* swimming *monas* unit.] A free form of certain parasitic flagellates of haptomonad.
- necton.—nekton.
- nectophore (nĕk'tōfō) *n.* [Gk. *nectas* swimming *phorōn* to carry] A nectocalyx that portion of common coenosarc on which nectocalyces are borne.
- nectopod (nĕk'tōpōd) *n.* [Gk. *nectas* swimming *podis* foot.] An appendage modified for swimming.
- nectosome (nĕk'tōsōm) *n.* [Gk. *nectas* swimming *sōma* body] Upper swimming part of siphonophore.
- nectozoid (nĕk'tōzōid) *n.* [Gk. *nectas* swimming *zōon* animal *eidos* form.] A nectocalyx.
- Needham sac,—spermatophore-sac, formed by dilatation of male genital duct, in certain cephalopods.
- negative tropism,—tendency to move away from the source of stimulus.
- nekton (nĕk'tōn) *n.* [Gk. *nectas* swimming] The organisms swimming actively in water.
- nema ( 'nēmā) *n.* [Gk. *nēma* thread.] A thread-like tubular projection at apex of graptolite scula fila ment a nematode.
- nemathectum ( 'nēm'āthēd'ŭm) *n.* [Gk. *nēma* thread *thēkto* box.] A protuberance on thallus of thallophytes.
- nemathybomes (nĕm'āthīb'ōmz) *n.* *plur* [Gk. *nēma*, thread *tybōs* humped.] Mesogloal parts containing developing nematocysts, as in Edwardsia.
- nematoblast (nĕm'ātiblās) *n.* [Gk. *nēma*, thread *blastos* bud.] The cell from which nematocyst develops.
- nematocalyx (nĕm'ātiblās) *n.* [Gk. *nēma* thread *kalyx* cup.] The guard-polyp of *Phormidium*, carrying nematocysts.
- nematocyst ( 'nēm'ātiblās) *n.* [Gk. *nēma* thread *kystis* bladder] A stinging cell cnida, cnidoblast.
- nematogene ( 'nēm'ātiblās) *n.* [Gk. *nēma* thread *gēnes* offspring] *Appl* phase of *Dicemidas* when their vermiform embryos escape from parent by perforating body wall.
- nematogone ( 'nēm'ātiblās) *n.* [Gk. *nēma* thread *gonē* seed.] A thick-walled propagative cell in certain mosses.
- nematology ( 'nēm'ātiblās) *n.* [Gk. *nēma*, thread *logos* discourse.] The study of Nematoda nematodology.
- nematophore ( 'nēm'ātiblās) *n.* [Gk. *nēma* thread *phorōn* to carry] A nematocalyx.
- nematophoron ( 'nēm'ātiblās) *n.* [Gk. *nēma* thread *phorōn* to carry] Part nematophore.
- nematosphere (nĕm'ātiblās) *n.* [Gk. *nēma* thread *sphaērōn* globe.] The capitate end of tentacle in certain sea-anemones.
- nematozooid (nĕm'ātiblās) *n.* [Gk. *nēma* thread *zōon* animal *eidos* form.] A defensive zooid in *Hydrax*.
- nematose (nĕm'ātiblās) *n.* [L. *nematosa* sylvan] Inhabiting open woodland places.
- neocarp (nĕ'okārp) *n.* [Gk. *neos* young *karpōs* fruit.] Production of fruit by an otherwise immature plant.

**neocer bellum** (nē'ōer'fēl'ūm) *n.* [Gk. *neos* new L. *dium* of cerebrum brain.] Cerebellar region which receives pontine fibres predominantly; *appl.* palaeocerebellum.

**Neo-Darwinism**,—a revival of Darwin's doctrine of natural selection as chief factor in evolution, working on germinal variations, not on acquired characters.

**neoccephalon** (nē'ōnēf'ēl'ōn -sēf) [Gk. *neos* young *enkephalos* brain.] The telencephalon or latest evolved anterior portion of brain.

**Neogae** (nē'ōy'ē, -gā'yē) *n.* [Gk. *neos* new *gaia* earth.] Zoogeographical res comprising the neotropical region.

**neogametes** (nē'ōg'amēts) *n.* [Gk. *neos* young *gamos* marriage.] *Appl.* forms of protozoa exhibiting precocious association of gametocytes.

**Neogene** (nē'ōj'ēn) *n.* [Gk. *neos* young *gēnes* age.] *Part.* or *appl.* the later Tertiary period Miocene and Pliocene epochs.

**neogenesis** (nē'ōj'ēn'sēts) *n.* [Gk. *neos* new *genesis* birth.] New tissue formation regeneration.

**Neo-Lamarckism**,—revival of Lamarck doctrine of evolution, that inherited acquired characters formed inception of specific differences.

**Neolaurentian** (nē'ōlōrēn'ahlān) *n.* [Gk. *neos* young *St Lawrence* River] *Part.* or *appl.* early Proterozoic era.

**Neolithic** (nē'ōlth'lk) *n.* [Gk. *neos* young *lithos* stone] *Appl.* or *part.* the newer or polished stone age.

**n omerph** (nē'ōmērf) *n.* [Gk. *neos* new *morphe* form] A structural variation from type an allele which induces new reactions in developmental processes.

**neomorphosis** (nē'ōmōrf'ōsēs) *n.* [Gk. *neos* new *morphosis* change.] Regeneration in case where new part is unlike anything in body.

**neonatal** (nē'ōnātāl) *n.* [Gk. *neos*

new L. *natus* born.] New-born recently hatched or born.

**neonychium** (nē'ōnīk'ūm) *n.* [Gk. *neos* young; *ny* nail.] A soft pad enclosing each claw of embryo of unguiculate vertebrates and of some other mammals, to prevent tearing of foetal membranes; horny claw-pad in birds before hatching.

**neopallium** (nē'ōpāl'ūm) *n.* [Gk. *neos* young L. *pallium* cloak.] In mammalian brain, the cerebral cortex, excluding hippocampus and pyriform lobe.

**n oplasm** (ē'ōplāsm) *n.* [Gk. *neos* new *plasma* formation.] New or added tissue, generally pathological.

**neoptil** (nē'ōpīl nē'ōpīl) *n.* [Gk. *neos* young *ptilon*, feather] A down feather down neomoptile.

**neosoptil** (nē'ōs'pīl, -pīl) *n.* [Gk. *neos* nestling *ptilon* feather] Feather of nestlings down feather neoptile.

**neotelmia** (ē'ōtēlmē) *n.* [Gk. *neos* young *telmeia* to stretch] The state of having development arrested to prolong immaturity neoteny.

**n otelmic** (ē'ōtēlmīk) *n.* [Gk. *neos* young *telmeia* to stretch] *Appl.* substitution royalties of termites which remain undeveloped in certain respects.

**neoteny** (nē'ōtēnē) *n.* [Gk. *neos* young *telmeia* to stretch.] Retention of larval characters beyond normal period or occurrence of adult characteristics in larva.

**neotropical** (ē'ōtrōp'īkl) *n.* [Gk. *neos* new *tropikos* tropic.] *Appl.* *part.* zoogeographical region consisting of Southern Mexico Central and South America, and the West Indies.

**neotype** (nē'ōtīp) *n.* [Gk. *neos* new *typos* pattern.] A new type a new holotype a new type specimen from the original type locality.

**Neozol** (nē'ōzōl'lk) *n.* [Gk. *neos* young *zōē* life.] *Part.* period from end of Mesozoic to present day.

**phrl** (nē'f'rīk) *n.* [Gk. *nephros* kidney] *Part.* kidney renal.

- nephridial (nēfrīd'īāl) *n* [Gk. *nephros* kidney *idion* dim.] Nephric, usually *appl* the small excretory tubules in kidney, *part.* excretory organ or nephridium of invertebrates.
- nephridioblast (nēfrīd'īōblāst) *n* [Gk. *nephros* kidney *idion* dim. *blastos* bud.] An ectodermal cell which gives rise to a nephridium.
- nephridiopore (nēfrīd'īōpōr) *n* [Gk. *nephros* kidney *idion* dim. *poros* passage.] The external opening of a nephridium.
- nephridiostome (nēfrīd'īōstōm) *n* [Gk. *nephros* kidney *idion* dim. *stoma* mouth.] Ciliated coelomic opening of a nephridium.
- nephridium (nēfrīd'īūm) *n* [Gk. *nephros* kidney *idion* dim.] An excretory organ usually that of invertebrates embryonic kidney tubule of vertebrates.
- nephrocytes (nēfrō'sītēs) *n* *pl* [Gk. *nephros* kidney *kytos* hollow.] Cells in sponges and insects which secrete waste and then migrate to surface of body to discharge brown cells for storage and removal of waste products, as in acid uric.
- nephroductic (nēfrōdū'tīk) *a* [Gk. *nephros* kidney *odios* labor.] Having one duct serving for both excretory and genital purposes.
- nephrogonod ct (nēfrōgōnōdūkt) *n* [Gk. *nephros* kidney *gonos* seed *L. ducere* to lead.] Excretory and genital duct in one.
- nephroid (nēfrō'id) *a*. [Gk. *nephros* kidney *eidos* form.] Kidney shaped reniform.
- nephrolytic (nēfrōlīt'īk) *a* [Gk. *nephros* kidney *lysis* to dissolve.] *Part* or designating enzymatic action destructive to kidneys.
- nephromer (nēfrōmēr) *n* [Gk. *nephros* kidney *meros* part.] Nephrotome, *q.v.*
- nephromidium (nēfrōmīd'īūm) *n*. [Gk. *nephros* kidney *mixis* mixing.] A compound excretory organ comprising flame cells and coelomic canal.
- nephron (nēfrōn) *n* [Gk. *nephros* kidney.] Structural and functional unit of a kidney including the renal corpuscle convoluted tubules, and Henle's loop.
- nephropore (nēfrōpōr) *n* [Gk. *nephros* kidney *poros* passage.] A nephridiopore.
- nephros (nēfrōs) *n*. [Gk. *nephros* kidney.] A kidney usually the functional portion of a kidney.
- nephrostoma (nēfrō'stōmā) *n* [Gk. *nephros* kidney *stoma*, mouth.] The opening of a nephridial tubule into body cavity: nephrostome.
- nephrotome (nēfrōtōm) *n*. [Gk. *nephros* kidney *tomos* to cut.] That part of a somite developing into an embryonic excretory organ nephromere.
- nephrotic (nēfrō'tīk) *a*. [Gk. *nephros* kidney.] Postembryonic infantile; during infancy *appl* phase in development or evolution.
- nephrotic type (nēfrō'tīk tīp) [Gk. *nephros* kidney *typos* pattern.] Type or type specimen of a larva of a species.
- neritic (nērīt'īk) *a* [Gk. *nerites*, mussel.] *Part* or living only in coastal waters, *appl* oceanic.
- neritopelagic (nērītōpēlāj'īk) *a*. [Gk. *Nereis* Nereid *pelagos* sea.] *Part* or inhabiting, the sea above continental shelf.
- nerve (nēr'v) *n*. [L. *nervus* sinew.] Having nervis or veins.
- nerve (nēr'v) *n*. [L. *nervus* sinew.] The disposition of nerves or veins in leaf or membranous wing.
- nerve (nēr'v) *n*. [L. *nervus* sinew.] One of numerous grey fibrous cords connecting brain with all other parts of body vein of insect wing vein of leaf.
- nerve canal —a canal for passage of nerve to pulp of tooth.
- nerve cell —a cell characteristic of brain and nerve tissue: neurocyte, neurone.
- nerve centre, —collection of nerve cells associated with a particular function.

nerv ml nce,— superficial group of cells in some fishes acting as sense organ and connected with lateral line system.

nerve ending,—the terminal distal portion of a nerve modified in various ways.

nerve fibres,—thread-like structures of which nerves are composed.

nerve net,—a reticulum of nerve cells and their processes connecting sensory cells and muscular elements, in coelenterates.

nerve p. bagou,—five-sided nerve ring around mouth of echinoderms.

nervismotion (nēr'vīnō shōn) n. [L. *nervus* sinew *nervus* to move.] Motion due to direct stimulus from nerves.

nervi nervorum,—branching nerve fibres with end-bulbs in epineurium.

nervous (nēr'vūs) a. [L. *nervus* sinew] *Part.* nerves *appl.* tissues composed of nerve fibres.

nervous syst. m,—brain, spinal cord, nerves and all their branches taken collectively.

nerve (nēr'vāl) n. [L. *dim.* of *nervus* sinew] Branch or terminal portion of nerve of insect wing.

nervuration (nēr'vūrā shōn) n. [L. *nervus* sinew] Disposition of nerves neurulation.

nervus (nēr'vūr) n. [L. *nervus* sinew] One of rib-like structures which support membranous wings of insects, branches of tracheal system leaf vein.

nervus lateralis (nēr'vūs lāt'erāl'is) n. [L. *nervus* sinew *lateralis* *part. side.*] A branch of vagus nerve in fishes, connecting sensory lateral line with brain.

nerve terminalis (nēr'vūs tērmināl'is) [L. *nervus* sinew *terminalis* bounding] A cranial nerve associated with vomeronasal organ.

neuroptile,—neuroptil g.p

n knot,—karyosome

neuron (nēr'rūn) n. [A.S. *neor* mesh-work.] The initial spindle of dividing cell.

nerve netted veined—with veins in form of network.

nerve cells,—stinging cells in coelenterates nematocysts.

nerve (nūr'vāl) n. [Gk. *neuron*, nerve L. *ad* to.] Dorsally

nerve (nūr'vāl) n. [Gk. *neuron* nerve.] *Part.* or closely connected with nerves or nervous tissues.

neural arch,—arch formed on dorsal surface of vertebral centrum by neural plates and neural spine for passage of spinal cord.

neural canal,—canal formed by neural arches.

neural gland—a body on ventral side of nerve ganglion in arachnids, presumable homologue of hypophysis in Crustacea.

neural plates,—lateral members of a neural arch median row usually of eight bony plates, in carapace of turtle.

neuropophysis (nūr'pōf'is) n. [Gk. *neuron*, nerve *physis* from *phaino* to grow] The spinous process of a vertebra.

neuration (nūr'vāl shōn) n. [Gk. *neuron*, sinew] Disposition of nerves; neuration neuration.

neuraxis (nūr'āk'sis) n. [Gk. *neuron* nerve L. *axis* axis.] The cerebro-spinal axis; a neuraxon or axis cylinder.

neuraxon (nūr'āk'sōn) n. [Gk. *neuron* nerve *axon*, axis.] The central cylinder of medullated nerve-fibre.

neuroter (nūr'vāl'tēr'ik, nūr'vāl'tēr'ik) n. [Gk. *neuron* nerve *enteron* gut.] *Part.* neurocoel and enteric cavity *appl.* canal temporarily connecting posterior end of central canal of spinal cord with posterior end of enteric cavity.

neuricity (nūr'vāl'tē) n. [Gk. *neuron* nerve.] Property peculiar to nerves.

neurilemma (nūr'vāl'm'ā) n. [Gk. *neuron* nerve *lemma*, skin.] Neurolemma, g.p. sheath of Henle g.

neurility (nūr'vāl'tē) n. [Gk. *neuron*, nerve.] The stimuli-transmitting capacity of nerves.

- neurite (nū rīt) *n* [Gk. *neuron* nerve.] The axis-cylinder process axon, *q.v.*
- neuroblastaxis (nū rōb'lōstāk'sis) *n* [Gk. *neuron*, nerve *blastos* life *axis* arrangement.] Tendency of nerve fibres or ganglion cell groups to migrate or growth of dendrites towards source of most frequent stimulus.
- neuroblasts (nū rōblāst) *n. plur.* [Gk. *neuron* nerve *blastos* bud.] Special epithelial cells from which nerve cells are formed.
- neurocentral (nū rōen'trāl) *a.* [Gk. *neuron* nerve *L. centrum* centre.] *Appl.* two vertebral synchondroses persisting during first few years of human life.
- n* urocho d (nū rōkōrd) *n.* [Gk. *neuron* nerve *chordis* string] A giant fibre, *q.v.*
- neurocirrus (nū rōēr'is) *n.* [Gk. *neuron* nerve *L. cirrus* curl.] The cirrus of neuropodium of polychaete annelid.
- neurocel (nū rōēl) *n* [Gk. *neuron* nerve *kēllos* hollow] The cavity of central nervous system.
- neurocranium (nū rōkrā'plēm) *n* [Gk. *neuron* nerve *kranion* skull] The cartilaginous or bony case containing the brain and capsules of special sense organs of viscerocranium.
- n* urocrin (nū rōkrin) *a.* [Gk. *neuron* nerve *krisin* to separate.] *Part.* secretory function of nervous tissue or cells neurosecretory *n.* A substance or hormone liberated at nerve endings neurohumor
- n* urocyte (nū rōēl) *n* [Gk. *neuron* nerve *kytos* hollow] Nerve cell with its outgrowths neurone.
- neurocyton (nū rōē'tōn) *n.* [Gk. *neuron* nerve *kytos* hollow] The body of a nerve cell cyton.
- neurodron (nū rōēn drōn) *n* [Gk. *neuron* nerve *dendron* tree] A dendrite.
- n* uro pithell m (nū rō-ēpūthē lēm) *n* [Gk. *neuron* nerve *epithē* upon *thēle* nipple.] S perfolial layer of cells where specialized for a sense-organ.
- n* ur fibril (nū rōē'tbril) *plu.* [Gk. *neuron* nerve *L. fibrilla* fine fibre.] Exceedingly fine fibres of which a medullated nerve fibre is composed fibrils in nerve cells, and extending into dendrites and axons neurofibrillae.
- neurogenesis (nū rōēn'ēsis) *n.* [Gk. *neuron* nerve; *genesis* descent.] Nerve production.
- neurogeni (nū rōēn'ik) *a.* [Gk. *neuron* nerve *genesis* birth.] Depending on discharge of nervous stimuli as certain muscular contractions.
- neuroglandular (nū rōēn dōlār) *a.* [Gk. *neuron* = *ne* *L. glandula*, small acorn.] *Part.* relation between nervous system and glands.
- neuroglia (nū rōēl'ā, nū rōēl'ā) *n. plur.* [Gk. *neuron* nerve *glia*, glue.] Cells, fibrous protoplasmic, supporting nerve cells and nerve fibres astrocytes and oligodendrocytes.
- neurohumor (nū rōēl mō) *n* [Gk. *neuron*, nerve *L. humor* moisture.] Hormone produced by nervous tissue or associated glands which activates or inhibits other nervous tissue or its effectors neurohormone
- neurohypophysis (nū rōēl pōf'ēsis) *n* [Gk. *neuron* nerve *hypo* under *physis* to grow] The pars nervosa of posterior lobe and infundibulum of pituitary gland neural lobe and stalk.
- neurite (nū rōēl) *a.* [Gk. *neuron* nerve *ides* form] Like nerve *appl.* intercellular conduction by non-nervous tissue *appl.* intracellular transmission of stimuli as in protozoa.
- n* ur kerati (nū rōēl'atīn) *n.* [Gk. *neuron* nerve *keras* horn.] A pseudokeratin of nervous tissue.
- neurolemmas (nū rōēl m) *n* [Gk. *neuron* nerve *lemma* skin.] A delicate elastic membrane outside medullary sheath of nerve fibre primitive sheath nucleated sheath of Schwann

- ur logy ( ð ról'ðj) *n* [Gk. *neur* *on* nerve *logos* discourse.] The study of the morphology physiology and pathology of the nervous system.
- n* uromasts ( ð rómast) *n. pl.* [Gk. *neur* *on* nerve *mastos* knoll.] Groups of sensory cells in lateral line system of fishes.
- n* neur mere (nð rómér) *n.* [Gk. *neur* *on*, nerve *meros* part.] A spinal segment corresponding in length to extent of attachment of pair of spinal nerves, division of convenience not structural, segmental ganglion of annelids and arthropods.
- neuromery (nðróm érf) *n.* [Gk. *neur* *on* nerve *meros* part.] Appearance of segmentation in developing nervous system.
- neuromuscular (nð rómús'kúlár) *a.* [Gk. *neur* *on*, nerve *L. musculus* muscle] *Peri* nerve and muscle *appl.* muscle containing both striped and smooth fibres neuromyal.
- neuromyal (nð róm'ál) *a.* [Gk. *neur* *on* nerve *my* muscle.] Neuromuscular *appl.* junction of end-plate and muscle as functional unit.
- n* urone (nð ðn) *n.* [Gk. *neur* *on* nerve.] The nerve cell with its outgrowths, structural unit of the nervous system *curon* neurocyte.
- neurone (nð róném) *n.* [Gk. *neur* *on*, nerve *neuma*, thread.] A nerve fibril running parallel to myoneme in an infusorian.
- uronephroblast ( ð róné'froblist) *n.* [Gk. *neur* *on* nerve *nephros* kidney *blastos* bud.] One of cells derived from one of megameres, in segmenting egg of Clapans, which later give rise to part of germinal bands from which nerve cord and nephridia develop.
- urophage ( ð rófá) *n. pl.* [Gk. *neur* *on*, nerve *phagō*, to eat.] Phagocytic cells that encroach upon and destroy nerve cells in old age.
- neurophan (nð'rofán) *a.* [Gk. *neur* *on*, nerve *phainō* to appear] Nervous, sensory, *appl.* supposed nervous fibrils of Ciliata.
- neuropil (nð'rópil) *n.* [Gk. *neur* *on*, nerve *L. pilus* hair] *I* ganglia, as of earthworm, network of processes of association, motor and sensory neurones neuropil neuropileus; punctate or plexiform intercellular substance of grey matter forming layer of glial expansions and dendrites constituting the synaptic field neuropilema.
- n* uroplasm (nð róp'lásm) *n.* [Gk. *neur* *on* nerve *plasma*, form.] The undifferentiated portion or inter-fibrillar substance of cytoplasm of neurone.
- neuropodium ( ð'rópó'dídm) [Gk. *neur* *on* nerve *pous* foot.] Ventral lobe of polychaetan parapodium terminal fibril of non-medullated nerve fibre.
- n* uropore ( ð rópó ) *n.* [Gk. *neur* *on*, nerve *pore* passage.] Anterior opening of neurocoel to exterior
- neuropterous (nðróp'térús) *a.* [Gk. *neur* *on* nerve *pteron* wing] *III* wing wings with network of nervures lace-winged.
- n* urosecretory (nð rósékré'tórí) *n.* [Gk. *neur* *on*, nerve *L. secrevere* to separate.] *Appl.* or *part.* gland-like nerve cells.
- neuroskel to (nð rósékl'ítón) *n.* [Gk. *neur* *on* nerve *skelētos* dried up.] Endoskeleton.
- neurosomes (nð rósésm) *n. pl.* [Gk. *neur* *on*, nerve *soma*, body] Mitochondria of nerve cells.
- neurosynaps (nð rósínáps) *n.* [Gk. *neur* *on*, nerve *synapsis* union.] Contiguity of nerve cells through terminal arborizations.
- n* urotendinous (nð rótén'dínt) *a.* [Gk. *neur* *on* nerve *L. tendere* to stretch] Concerning nerves and tendons.
- n* urotrophí (nð rótrof'ík) *a.* [Gk. *neur* *on*, nerve *trophē*, to nourish.] Nourishing the nervous system.
- neurotropism (nðrót'róptm) *n.* [Gk. *neur* *on* nerve *trophē* to turn.] The attraction exerted by nervous tissue upon developing nerve tissue.
- n* utotubul *a.*—delicate structures within axons, observed with the aid of an electron-microscope.



- neurula** (nū rōlā) *n* [Gk. *neuron* nerve.] The stage in development of Chordata which coincides with formation of the medullary or neural tube.
- neuston** (nū stōn) *n* [Gk. *neustos* swimming.] Organisms floating or swimming in surface water or inhabiting surface film.
- neuter** (nū tēr) *a* [L. *neuter* of neither sex.] Sexless having neither stamens nor pistils.
- neutral** (nū trāl) *a*. [L. *neuter* neither.] Neither male nor female; neither acid nor alkaline  $pH=7$  achromatic, as white, grey and black day neutral *q.v.*
- neutrophil** (nū trōfīl) *a*. [L. *neuter* neither Gk. *philein* to love.] *Appl* white blood corpuscles whose granules stain only with neutral stains neutrophilic. *n*. A polymorphonuclear leucocyte.
- N-factor**—a certain antigen in erythrocytes of higher animals.
- niacin**—nicotinic acid *q.v.*
- niche** (nich) *n*. [F. *niche* from It. *nicchia*, recess in wall.] The place of an organism in its biotic environment microhabitat, immediate special environment in general habitat.
- nicotinic acid**—the pellagra-preventive or P.P. factor of vitamin B complex niacin  $C_6H_5O_2N$
- nictitant** (nik tītānt) *a*. [L. *nictare* to wink.] *Appl* an ocellus with central lens spot.
- nictitating m. membrane**—third eyelid a membrane which assists in keeping eye clean in reptiles birds, mammals.
- nidamental** (nid əmən'tāl) *a*. [L. *nidus* nest.] *Appl* glands which secrete material for an egg covering.
- nidation** (nid əshūn) *n*. [L. *nidus* nest.] The renewal of uterus lining between menstrual periods embedding of fertilized ovum in uterine mucous membrane.
- nidicolous** (nidik əlūs) *a*. [L. *nidus* nest *colere* to dwell.] Living in the nest for time after hatching.
- nidifugous** (nidif'ūgūs) *a*. [L. *nidus* nest *fuger* to flee.] Leaving the nest soon after hatching.
- nidulus** (nid əlūs) *n*. [L. *dim.* of *nidus* nest.] A group of nerve-cell bodies in central nervous system the nucleus from which a nerve originates.
- nidus** (nī dūs) *n*. [L. *nidus* nest.] A nest a nest like hollow; a nucleus a cavity for development of spores.
- nidus hirundinalis**—a fossa of cerebellum *nidus avis*.
- nigrescent** (nigrə snt) *a*. [L. *nigrescere* to turn black.] Nearly black blackish.
- nipple** (nīpl) *n*. [*Dim.* of A.S. *neth* for *nab* nose.] Teat mammary papilla mamilla.
- Nissl granules** [F. *Nissl* German neurologist] Angular particles, consisting mainly of nucleoprotein, found in cytoplasm of unfatigued nerve cells chromophil or tigroid bodies.
- nisus formativus** (nī sūs fōrmātīvūs) *a*. [L. *nisus* effort *formare* to form.] The tendency to reproduce.
- nitid** (nī tīd) **nitidous** (nī tīdūs) *a*. [L. *nitidus* shining.] Glossy.
- nitrification** (nī trīfīk əshū) *n*. [Gk. *nitron* soda L. *facere* to make.] Oxidation of ammonia to nitrites and of nitrites to nitrates, as by action of bacteria.
- nitrogenous** (nī trōj ənūs) *a*. [Gk. *nitron* soda *genes* descent.] Part or containing nitrogen.
- nitrogenous equilibrium**—equilibrium of body maintained by equality of income and output of nitrogen.
- nitrophilous** (nī trōfīlūs) *a*. [Gk. *nitron* soda *philein* to love.] Thriving in nitrogenous soils.
- nitrophyt** (nī trōfīt) *n*. [Gk. *nitron* soda *phyton* plant.] A nitrophilous plant.
- nociceptive** (nō sēp'tīv) *a*. [L. *nocere* to hurt *capere* to take.] *Appl* stimuli which tend to injure tissues or induce pain *Appl.* reflexes which protect from injury.

nociceptor (nō'sēpt'is) *n* [L. *nocere* to hurt *capere* to take] A receptor sensitive to noxious stimuli

noctilucant (nōk'tilū'sēnt -it) *a*. [L. *nox* night *lux* light.] Phosphorescent luminescent.

nocturnal (nōk'tūrnāl) *a*. [L. *nox* night.] Seeking food and moving about at night only occurring at night.

nodal (nōdāl) *a*. [L. *nodus* knob.] *Part* node.

nod (nōd) [L. *nodus* knob] The knob or joint of a stem at which leaves arise aggregation of specialized cardiac cells as atrioventricular and sinoatrial nodes a lymph gland one of the constrictions of medullary sheath or nodes of Ranvier *nodus*

nodose (nōd'ōs) *a*. [L. *nodus* knob] Having intermediate and terminal joints thicker than remainder having knots or swellings.

nodular (nōd'ulār) *a*. [L. *nodulus* dim. of *nodus* knob] *Part* nodule or knot.

nodal (nōd'ul) *n*. [L. *nodulus* dim. of *nodus* knob.] A small knob-like structure *nodulus*.

noduliferous (nōd'ulif'ērūs) *a*. [L. *nodulus* dim. of *nodus* knob *ferre* to carry] Bearing nodules *ephl* roots of leguminous plants.

nodules—nodule.

nodus,—nod

noemati (nō'emāt'ik) [Gk. *noēma* thought.] *Part* mental processes

nomenclature (nō'mēnkli'tūr nō'mēn'kli'tūr) *n*. [L. *nomen* name *calare* to call.] System of naming plants, animals, organs, etc. binomial nomenclature.

nomogeneal (nō nō'yēn 'ēls) *n*. [Gk. *nomos* law *genesis* descent.] View that development and evolution are governed by laws of development and not by environment.

non-conjunction,—failure of chromosome pairing

u n-di junction,—failure of nor

mal pair of chromosomes to separate at meiosis.

non-medullated, non myelinated, *ephl* nerve fibres without medullary sheath amyelinate.

u a-viable —incapable of developing normally or of surviving parturition.

norma (nōr'mā) *n* [L. *norma* rule.] View of the skull as a whole from certain points.

normoblasts (nōr'mōblāsts) *n*. *plur* [L. *norma* rule Gk. *Normas* bud.] Immature nucleated red blood corpuscles, derived from polychromatophil erythroblasts.

normocyte (nōr'mōsēt) *n*. [L. *norma* rule Gk. *kytos* hollow] The fully developed red blood corpuscle.

nosogenic (nōs'jēn'ik) *a*. [Gk. *nosos* disease *genesis* to produce.] Causing disease pathogenic.

nostrils (nōs'trīls) *n*. *plur*. [A.S. *nostryl* nostril] The external openings of the nose *naris*.

thocli (nōth'oklīs) *n*. [Gk. *nothos* illegitimate *klinein* to slant] The serial arrangement of characters or forms produced by crossing species hybrid *cline*.

notochord (nō'tōkōrd) *n*. [Gk. *noton*, back *chorda* cord.] The dorsal supporting axis of lowest vertebrates, transitory in the others *chorda* dorsalis.

otochordal (nō'tōkōrdāl) *a*. [Gk. *noton* back *chorda* cord.] *Part* or enveloping notochord *ephl* sheath, *thecor* etc.

notocirrus (nō'tōsēr'is) *n*. [Gk. *noton* back L. *cirrus*, curl.] Cirrus of notopodium of Polychaeta.

Notog (nō'tōj'ē's, -gā yā) [Gk. *notos* south *gēis* earth] Zoogeographical area comprising Australian, New Zealand and Pacific Ocean Islands regions.

notogensis (nō'tōjēn 'ēns) *n*. [Gk. *noton* back *genesis* origin.] Development of the notochord, and the associated stage of mesoderm differentiation.

notonectal (nō'tōnēk'tāl) *a*. [Gk. *noton* back *nēktos* swimming] Swimming back downwards.

- notopodium (nō tōpō dīfūm) *n.* [Gk. *notos* back *podus* foot.] Dorsal lobe of polychaetan parapodium.
- tottribe (nō tōtīb) *n.* [Gk. *notos* back *tribein* to rub.] *Appl* flowers whose anthers and stigma touch back of insect as it enters calyx a device for securing cross-fertilisation
- notum (nō tūm) *n.* [Gk. *notos* back.] The dorsal portion of insect segment tergum.
- nucellus (nū ēl'ūs) *n.* [L. *alium* of *nux* ut.] Parenchymatous tissue between ovule or megaspore and its inner integument, and extending from chalazal base to micropyl at pex.
- nuchal (nū k'āl) *n.* [L.L. *nucha* nape of neck.] *Pert* nape of the neck *appl* two sense organs regarded as factory on prostomium of Chaetopoda *appl* thin cartilage between head and anterior dorsal part of mantle in decapod Cephalopoda *appl* anterior plate of chelonian carapace *appl* flexure of medulla oblongata. *n.* A unpaired posterior dorsal skull bone in Chondrostei
- nuciferous (nū sīf'ērūs) *a.* [L. *nux* nut *ferre* to carry] Nut-bearing
- devouring (nū ēl' ōrūs) *a.* [L. *nux* nut *vorare* to devour] Nut eating
- nuclear (nū k'ēār) [L. *nucleus* kernel] *Pert* nucleus.
- nuclear disc,—a star-like structure formed by chromosomes in equator *f* spread *d* ring mitosis
- nuclear layer—internal layer of cerebellar cortex inner l. of retina, between inner and outer plexiform layers and outer l. between outer plexiform layer and limiting membrane of layer of rods and cones.
- nuclear membrane,—delicate membrane bounding nucleus, formed from surrounding cytoplasm
- nuclear plate—the equatorial plate.
- nuclear spindle—a spindle-shaped structure formed of fine fibrils, in

- cytoplasm surrounding nucleus, a stage in mitosis.
- nucleas (nū k'ēās) *n.* [L. *nucleus*, kernel.] Enzym of pancreatic and other cells.
- nucleate (nū k'ēāt) *a.* [L. *nucleus* kernel] Having a nucleus.
- nucleation (nū k'ēā shūn) *n.* [L. *nucleus* kernel.] Nucleus formation.
- nuclei, —*pl.* of nucleus.
- nucleic (nū k'ēik) *a.* [L. *nucleus*, kernel.] *Appl* and *pert* acids containing phosphorus, found in nuclei of cells.
- nucleiform (nū k'ēifōrm) *a.* [L. *nucleus* kernel *forma*, shape.] Shaped like a nucleus.
- nuclein (nū k'ēin) *n.* [L. *nucleus*, kernel.] A nucleoprotein found in nuclei —yields a protein and nucleic acid by action of pancreatic juice  $C_{10}H_{10}O_{10}N_2P_2$ .
- nucleolus (nū k'ēōlē'ūs) *n.* [L. *nucleus* kernel Gk. *chylus*, juice.] Karyenchyma *f* *n.*
- nucleocytoplasm (nū k'ēōlē'ūs plāzm) *n.* [L. *nucleus* kernel; Gk. *chylus* juice *plasma* mould.] The semi-fluid ground-substance of nucleus nuclear sap.
- nucleoid (nū k'ēōid) *a.* [L. *nucleus* kernel Gk. *eidōs* form.] Resembling nucleus. *n.* A nucleus-like body occurring in certain blood corpuscles a body taking part in bacterial cell division.
- nucleolar (nū k'ēōlār) *a.* [L. *dim.* of *nucleus* kernel] *Pert* a nucleolar nucleolar organiser—granule, or gene, which collects or secretes the nucleolus.
- nucleolus (nū k'ēōlē'ūs) *n.* [Dim. of L. *nucleus* kernel.] Small deeply staining intra-nucleolar granule which may divide in mitosis.
- nucleolar centrosome—a nuclear body which may act as a centrosome during mitosis
- nucleolus (nū k'ēōlē'ūs) [L. *nucleolus* *dim.* of *nucleus* little kernel.] A rounded mass occurring in a nucleus plasmosome or a karyosome.

nucleomicrosomes (n'klēomī'krō-sōm) *n. pl.* [L. *nucleus* kernel Gk. *microtus* small *soma*, body] Nuclear chromatin granules.

nucleoplasm (nū'klēōplāz'm) *n.* [L. *nucleus* kernel Gk. *plasma* mould.] Reticular nuclear substance karyoplasm of cytoplasm.

nucleoprotein (nū'klēōprō'tēin) *n.* [L. *nucleus* kernel Gk. *protein* first.] A compound of protein and nucleic acid constituent of cell nuclei.

nucleus (nū'klēūs) *n.* [L. *nucleus* kernel.] Complex spheroidal mass essential to life of most cells mass of grey matter in central nervous system nucleus protoconch *q.v.*

nucleus ambiguus,—cells in medulla oblongata from which originate the motor fibres of glossopharyngeal and vagus, and of cerebral part of spinal accessory nerves.

nucleus pulposus,—the soft core of an intervertebral disc, remnant of notochord.

nuculanism (nū'klā nūm) *n.* [L. *nucula*, small nut.] A fleshy fruit, like grape, differing from berry in being superior.

nudibranchiate (nū'dībrāng'kiēt) *n.* [L. *nudus* naked *branchiae* gills.] Having gills not covered by protective shell or membrane.

nuda date (nū'dikō'dīt) *n.* [L. *nudus* naked *cauda*, tail.] Having a tail not covered by hair or fur.

nudulous (nū'dikōlūs) *n.* [L. *nudus* naked *caulis* stem.] *Appl.* or having stems without leaves.

nudiflorous (nū'drō'fōrūs) *n.* [L. *nudus* naked *flor*, flower.] Having flowers without glands or hairs.

nudum (nū'dūm) *n.* [L. *nudus* naked.] Small bared area, as sensitive portion of antenna of butterflies.

N. h. glands of,—anterior lingual glands or Blandin glands.

nulliplex (nū'liplēks) *n.* [L. *nullus* none *plexus* interwoven.] Having recessive but no dominant genes

for a given character in polyploidy.

numerical—*appl.* hybrid of parents that have different chromosome numbers.

nummulati (nūm ūlā shūn) *n.* [L. *nummus* coin.] The tendency of red blood corpuscles to adhere together like piles of coins.

nummulitic (nūm ūlī'tik) *n.* [L. *nummus* coin.] Like, *pyralis*, or containing nummulites.

uptial flight,—flight taken by queen bee when fertilisation takes place.

nurse cells,—single cells or layers of cells attached to or surrounding an egg-cell, probably for elaboration of food-material.

nurse generation,—an asexual budding generation of some Tunicata, in which phorozooids act as foster parents to later formed buds, the gonozooids.

nutrature (nū'tūr) *n.* [M.E. *nutrice* nursing.] The sum-total of environmental influences, *opp.* nature.

nut (nūt) *n.* [A.S. *nutu* nut.] Dry indehiscent one-celled fruit with hard pericarp glans.

nutant (nū'tānt) *n.* [L. *nutare* to nod.] Bent downwards drooping.

nutation (nū'tā shūn) *n.* [L. *nutare* to nod.] Curvature or change of position in organs of a growing plant; slow rotating movement by pseudopodia.

n. tlat (nū'tlēt) *n.* [Dane. of *nut*.] The stone formed in drupaceous fruits.

nutricism (nū'trīz'm) *n.* [L. *nutrix* nurse.] Symbiotic relationship with all the benefit to one partner.

nutrie t (nū'trēt) *n.* [L. *nutrire* to nourish.] Nourishing *appl.* artery to marrow of bone, and foramen of entry *n.* Food substance.

utrilite (nū'trīlīt) *n. pl.* [L. *nutrire* to nourish.] Accessory organic food substances like vitamins.

utrition (nū'trīsh ūn) *n.* [L. *nutrire* to nourish.] The ingestion, digestion, and assimilation of food materials by animals and plants.

- nutritive** (nū trīv) *a.* [L. *nutrivo* to nourish] Concerned in function of nutrition *appl.* yolk, polyp, rood, plasma, etc.
- nyctanthous** (niktān'thūs) *a.* [Gk. *nyktos* nightly *anthos* flower] Flowering at night.
- nyctinasty** (nik'tink'stī) *n.* [Gk. *nyktos* nightly *nastes* pressed close.] Sleep movement of plants.
- nyctipelagic** (nik'tipēllā'jē) *a.* [Gk. *nyktos* nightly *pelagos* sea.] Rising to surface of sea only at night.
- nyctitropism** (nik'titrōp'izm, nik'titrop'izm) *n.* [Gk. *nyktos* nightly *trepein* to turn.] Tendency of certain leaves to curve pwards at night sleep movement *nyctinasty* *nyctitropic* curvature.
- nymph** (nimf) *n.* [Gk. *nymphē* chrysalis.] A stage following the larval in insect metamorphosis formerly a pupa.
- nymphae** (nim fē) *n. pl.* [Gk. *nymphē* bride.] The labia minora bell edges to which the hinge ligaments are attached in bivalves.
- nymphal** (nim fāl) *a.* [Gk. *nymphē* chrysalis.] *Pieris* a nymph; *appl.* hormone secreted by corpus allatum during early stages and inhibiting premature metamorphosis.

## O

- oar feathers**, — the wing feathers used in flight.
- obcompressed** (ōb'kōmprēst') *a.* [L. *ob* towards *comprimere* to compress] Flattened in vertical direction.
- obcordat** (ōbkōr'dlī) *a.* [L. *ob* against *cor* heart.] Inversely heart-shaped *appl.* leaves which have stalk attached to apex of heart.
- bdiplostemonous** (ōbdīplōstēmōnūs) *a.* [L. *ob* against Gk. *diplos* double *stemon* stamen] With outer series of stamens opposite petals
- obellon** (ōbē'llōn) *n.* [Gk. *obelos* a spit.] The point between parietal foramina, on sagittal suture.
- obex** (ōb ēks) *n.* [L. *obex* obstacle] A triangular layer of grey matter also a membranous ependymal layer in roof of fourth ventricle a limiting factor *appl.* plant distribution. *Plas.* obices.
- obimbricate** (ōblīm'brikāt) *a.* [L. *ob* reversely *imbrico* tile.] With regularly overlapping scales, with the overlapping ends downwards.
- oblanceolate** (ōblān'sēōlāt) *a.* [L. *ob* reversely *lancea*, spear] Inversely lanceolate.
- obligate** (ōbligāt) *a.* [L. *obligatus*, bound.] Obligatory; limited to one mode of life or action not optional *appl.* aerobes, anaerobes; *appl.* sexual reproduction *appl.* parthenogenesis; *appl.* saprophytes; *appl.* parasites which cannot exist independently of host *appl.* symbionts. *Opp.* facultative.
- oblique** (ōblīk) *obliquus* (ōblī'kwūs) *a.* [L. *obliquus* slanting] Placed obliquely *appl.* septum forming ventral wall of thoracic air-sac in birds *appl.* certain muscles *appl.* vein of left atrium, etc. asymmetrical *appl.* leaves *appl.* cleavage alternating or spiral.
- obliterate** (ōblit'ērāt) *a.* [L. *obliteratus* erased.] Indistinct or profuse; *appl.* markings on insects suppressed.
- oblongata**, — medulla oblongata *f. n.*
- obovate** (ōbōvāt) *a.* [L. *ob* against *ovum* egg] Inversely egg-shaped *appl.* leaf with narrow end attached to stalk.
- obovoid** (ōbōvōid) *a.* [L. *ob* against *ovum* egg Gk. *oides* shape.] Inversely ovoid roughly egg-shaped, with narrow end downwards.
- obsolescence** (ōbsōlē'sēns) *n.* [L. *obsolescere* = wear out.] The gradual reduction and consequent disappearance of a species, gradual cessation of physiological process; blurred portion of a marking on an animal

**become** (ob sōlē) *a.* [*L. obsolescere* to wear out.] Wearing out or disappearing; *appl.* any character that is becoming less and less distinct in each succeeding generation.

**apical** (ob sōlē) *a.* [*L. obsolescere* covered over.] *Appl.* pupa with wings and legs held to body of exarate.

**obscure** (ob sōlē) *a.* [*L. obscurus* to close.] *Part.* any structure in neighbourhood of obturator foramen.

**obscure foramen**,—an oval foramen between ischium and os pubis.

**obtus** (ob tūs) *a.* [*L. obtusus* blunt.] With blunt or rounded end. *appl.* leaves. *appl.* left margin of heart.

**obtusilangual** (ob tūs'ling'gwāl) *a.* [*L. obtusus* blunt *lingua*, tongue.] Short-tongued.

**obtus** (ob tūs) *a.* [*L. obtusus* to overshadow.] With some structure overhanging the parts so as partially to conceal them.

**obverse** (ob vērs) *a.* [*L. obversus* to turn round.] With base narrower than apex.

**obvolute** (ob vōlūt) *a.* [*L. obvolvere* to wrap round.] Overlapping. *appl.* vernation when half of one leaf is wrapped round half of another similar leaf half-equitant.

**obvolute** (ob vōlūt) *a.* [*L. obvolvere* to wrap round.] Bent downwards and inwards. *appl.* wings, elytra of insects, etc.

**occipital** (ōk sīp'itāl) *a.* [*L. occiput*, back of head.] *Part.* back part of head or occipital bones.

**occipitalia** (ōk sīp'itāl) *a.* [*L. occiput* back of head.] The group of parts of cartilaginous brain case forming back part of head occipital bones.

**occipito-frontal** (ōk sīp'itāl'frōntāl) *a.* [*L. occiput* back of head *Gk. Altes* Titan.] *Appl.* membrane closing gap between skull and neural arch of atlas in amphibians.

*appl.* dorsal (posterior) and ventral (anterior) membranes between margin of foramen magnum and atlas in mammals atlanto-occipital.

**occipito-axial** (ōk sīp'itāl'āks) *a.* [*L. occiput* back of head *axis* axis.] *Appl.* ligament or membrana tectoria connecting occipital bone with axis or epistropheus.

**occipitofrontal** (ōk sīp'itāl'frōntāl) *a.* [*L. occiput* back of head *frons* forehead.] *Appl.* longitudinal arc of skull. *appl.* fasciculus of long association-fibres between frontal and occipital lobes of cerebral hemisphere. *appl.* muscle, the epicranium.

**occiput** (ōk sīp'it, ōk sīp'oot) *n.* [*L. occiput* back of head.] Occipital region of skull dorsolateral region of insect head.

**occlusal** (ōkloo sāl) *a.* [*L. occludere* to shut in.] Contacting the opposing surface. *appl.* surfaces of teeth which touch those of the other jaw when jaws are closed.

**occlusion** (ōkloo shūn) [*L. occludere* to shut in.] Overlapping of activation of motor neurones by simultaneous stimulation of several afferent nerves.

**occlusor** (ōkloo sōr) *n.* [*L. occludere* to shut in.] A closing muscle. *a.* *Appl.* muscles of an operculum or movable lid.

**ocellate** (ō'ēllāt) *a.* [*L. ocellus* little eye.] Like an eye or eyes. *appl.* markings on many animals.

**ocellated** (ō'ēllātēd, ōll'itātēd) *a.* [*L. ocellus* little eye.] Having ocelli having eye-like spots or markings; ocelliferous.

**ocellation** (ō'ēllāt shūn) *n.* [*L. ocellus* little eye.] Condition of having ocelli, or of having ocellate markings. ocellate marking.

**ocellus** (ōll'itūs) [*L. ocellus* little eye.] A simple single eye or eyespot found in many lower animals. an eye-like marking as in many insects, fishes, etc. large cell of leaf epidermis, specialised for reception of light.

**ochrea**,—ocrea.

ochrophore (ô'krofô'r) *n* [Gk. *ochros* pale yellow *pherein* to bear] A yellow pigment-bearing cell. iridocyte.  
 ocrea (ôk'reâ) *n* [L. *ocrea*, greave.] A tubular sheath like expansion at base of petiole. a sheath. ochrea.  
 ocreaceous (ôk'reâ'shûs) *a*. [L. *ocrea* greave] Ocrea like *appt* various structures in plants and animals.  
 ocreate (ôk'reât) *a*. [L. *ocrea* greave.] Having an ocrea. booted sheathed.  
 octactine (ôktâk'tîn) *n* [Gk. *okto* eight *aktis* ray] A sponge spicule with eight rays. a modification of hexactine.  
 octagynous (ôktâj'inûs) [Gk. *okto* eight *gynê* woman.] Having eight pistils.  
 octamorous (ôktâm'ôrûs) [Gk. *okto* eight *môros* part.] *Appt* organs or parts of organs when ranged in eights *appt* parts of whorls of certain plants *appt* parts of certain Alcyonaria.  
 octandrous (ôktân'drûs) *a*. [Gk. *okto* eight *andros* man.] Having eight stamens.  
 octant (ôk'tânt) *n* [L. *octo* eight.] One of eight cells formed by division of fertilized ovule in plants. one of units in eight-celled stage in segmentation of ovum.  
 octogynous *a*, —octagynous *g*  
 octopetalous (ôk'tôpêt'alûs) *a*. [Gk. *okto* eight *petalon* leaf] Having eight petals.  
 octophore (ôk'tôfô'r) [Gk. *okto* eight *phoros* bearing] A modified ascus with eight pores arranged radially as in Haerangiomyces.  
 octoploid (ôk't'ploid) *a*. [Gk. *okto* eight *plous* onefold *eidos* form.] Having eight haploid chromosome sets. somatic cells. *a*. An octoploid organism.  
 octopod (ôk'tôpôd) [Gk. *okto* eight *pous* foot.] Having eight feet or arms.  
 octoradiat (ôk'tô'âdîât) [L. *octo* eight *radius* spoke.] Having eight rays or arms.  
 octosepalous (ôk'tôsep'alûs) *a*. [L. *octo* eight *F* *sepal* sepal.] Having eight sepals.

octosporous (ôk'tôspô'rûs) *a*. [Gk. *okto* eight *sporos* seed.] Having eight spores.  
 octostichous (ôktôstîkûs) *a*. [Gk. *okto* eight *stichos* row] Arranged in eight rows having leaves in eights in phyllotaxis.  
 octoxalic (ôk'tôxô'lik) *a*. [Gk. *okto*, eight *oxen* animal.] *Appt* a spore of gregarines containing eight sporozoites.  
 ocular (ôk'ûlâr) *s* [L. *oculus* eye.] Part or perceived by the eye.  
 ocular lobe —projecting thoracic lobe in some beetles.  
 ocular plates,—plates at end of ambubacral areas in sea urchins.  
 oculate (ôk'ûlât) *a*. [L. *oculus* eye.] Having eyes, or eye-like spots.  
 oculiferous (ôk'ûlif'ôrûs) oculigerous (ôk'ûlj'ôrûs) *a*. [L. *oculus* eye *ferre* carries to carry] Bearing eyes.  
 oculifrontal (ôk'ûlif'rôn'tâl) *a*. [L. *oculus* eye *frons* forehead.] Part. region of forehead and eye.  
 ocul motor (ôk'ûlomô'tô) *s* [L. *oculus* eye *movere* to move.] Causing movements of eye-ball; *appt* third cranial nerve.  
 oculonasal (ôk'ûlônâ'sâl) *a*. [L. *oculus* eye *nasus* nose.] Part. eye and nose.  
 oculus (ôk'ûlûs) *n* [L. *oculus* eye.] The eye leaf-bud; a tuber.  
 Oddi's sphincter [R. Oddi Italian anatomist]. Muscle fibres surrounding duodenal end of common bile-duct.  
 odontoblast (ôdôn'tôblâst) *n*. [Gk. *odous* tooth *blastos* bud.] One of columnar cells on outside of dental pulp that form denture.  
 odontothrion (ôdôn'tôthrîôn) *a*. [Gk. *od* tooth *thrion* pt.] Tooth socket alveol. dentis; pharynx.  
 odontoclast (ôdôn'tôklâst) *a*. [Gk. *odous* tooth *klaos* to break.] One of large multinucleate cells that absorb roots of milk teeth.  
 odontogony (ôdôn'tôj'ôni) *n* [Gk. *odous* tooth *gonos* to produce.] The origin and development of teeth.

odontoid (ôdôn'tôid) *n.* [Gk. *odous* tooth *oides* form.] Tooth-like *part.* the odontoid process.

odontoid process, — *dens*, tooth like peg on axis round which atlas rotates the centrum of atlas, which has first become free and finally fused with axis.

odontology (ôdôntôl'ôj) [Gk. *odous* tooth *logos* discourse.] Dental anatomy histology physiology and pathology

odontophor (ôdôn'tôf) *n.* [Gk. *odous* tooth *phorais* to carry.] The tooth-bearing organ in molluscs, including the radula, radula sac, cartilage, and muscles.

odontoplast (ôdôn'tôplâst) *n.* [Gk. *odous* tooth *plastos* moulded.] An odontoblast cell

odontostomatous (ôdôn'tostôm'âtrûs) *a.* [Gk. *odous* tooth *stoma*, mouth.] Having tooth-bearing jaws.

odoriphor (ôd ôrtôf) *n.* [L. *odor* smell Gk. *phorais*, to carry.] A group of atoms responsible for the odour of compound.

oecad (ô'kâd) *n.* [Gk. *oikos* to one home.] A form modified owing to habitat *ecologic* modification

oecophene, oecad. *Ophi* phyard.

oecosis, — *oikos*, *g*

oecium (ô'kîum) *n.* [Gk. *oikos*, abode.] The calcareous or chitinous covering of polyzoid.

oecid (ô'kôid) *n.* [Gk. *oikos* house *oides* form.] The stroma of blood corpuscle.

oecology (ôkôl'ôj) *n.* [Gk. *oikos* household *logos* discourse.] Ecology

oecoph (ô'kôf) *n.* [Gk. *oikos* household *phorais* to appear.] Oecad *g.*

oecotrophicosis (ô'kôtrôfôbôstô) *n.* [Gk. *oikos* household *trophos* food *hâsis* living.] Trophallaxis *g.*

oedestin (ôdê'mâtin) *n.* [Gk. *oedema* swelling.] The microsome of ground-substance of nucleus.

oenocyt (ô'noik) *n.* [Gk. *oinos* wine *kytos* hollow.] One of large

cells from clusters which surround trachea and fat body of insects and undergo changes in relation to moulting cycle.

oenocytoid (ô' ôel'tôid) *n.* [Gk. *oinos* wine *kytos* hollow *oides* form.] One of rounded acidophil leucocytes in haemolymph of insects.

oesophageal (ô'ôf'âj'ô'âj ô'ôf'âj ô'âj) *a.* [Gk. *oesophagus* gullet.] *Part* near oesophagus, as ganglia.

oesophagus (ô'ôf'âgûs) *n.* [Gk. *oesophagus* gullet.] That part of alimentary canal between pharynx and stomach, or part equivalent thereto.

oestradiol (ô'strâdî'ôl) *n.* [Gk. *ois* to gadfly *diolos* together.] Ovarian hormone, transformed within organism to oestrous and oestriol  $C_{18}H_{24}O_2$ .

oestrin, — oestrone, *g.*

oestrial, — one of the oestrogens in pregnancy urine  $C_{18}H_{24}O_2$ .

oestrogen (ô'strôjên) *n.* [Gk. *ois* to gadfly *gennais* to produce.] A substance which induces oestrus oestrogenic hormone.

oestrogeni (ô'strôjên'ik) *a.* [Gk. *ois* to gadfly *gennais* to produce.] Inducing oestrus *appl.* hormones.

oestrons (ô'strôn) *n.* [Gk. *ois* to gadfly.] The follicular oestrogenic hormones oestrin, folliculin, theelin  $C_{18}H_{24}O$ .

oestrous (ô'strûs) *a.* [Gk. *ois* to gadfly] *Part.* oestrus oestral.

oestrus (ô'strû) [Gk. *ois* to gadfly.] The sexual heat of animals rut oestrum oestration.

offset, — a short prostrate branch which takes root at apex and develops new individuals.

shoot, — lateral shoot from main stem.

oldium (ôld'îum) *n.* [Gk. *ovon*, egg *idios* alone.] The conoidal stage of some mildews thin-walled spore.

like (ôk'ô) *n.* [Gk. *oikos*, to have as one abode.] Habitat; oikos.

oikeals (ôik ôals) *n.* [Gk. *oikeais* act of dwelling.] The establishment of organisms in a new habitat *oecosis* (U.S.A.)



oikoid—oocoid, *q.v.*

oikoplast (oik'ōplāst) *n.* [Gk. *oikos* house *plastēs* moulded.] One of large glandular ectoderm cells which form gelatinous layer of appendicularians.

oikosite (oik'ōst) *n.* [Gk. *oikos* house *siteō* food.] A stationary or attached commensal or parasit oil gland,—a gland which secretes oil the uropygial gland in birds.

oleaginous (ōl ēj'īnūs) *a.* [L. *oleum* oil.] Oily *part* containing or producing oil.

olecranon (ōlēk'rīnōn) *n.* [Gk. *olektron* point of elbow.] A large process at upper end of hum.

oliferous (ōlēf'ērūs) *a.* [L. *oleum* oil *ferre* to carry.] Producing oil.

olein (ōlēn) *n.* [L. *oleum* oil.] A fat, liquid at ordinary temperatures, found in animals and vegetable tissues.

olocyst (ōlēost) *n.* [L. *oleum* oil Gk. *hystis* bladder.] A diverticulum of the nectocalyx.

oleosome,—elaioplast, *q.v.*

olactory (ōlēk'torī) *a.* [L. *oler* to smell *facere* to make.] *Part* sense of smell *appl.* stimulus structures, reactions.

olfactory lobe,—lobe projecting from anterior lower margin of cerebral hemispheres.

olfactory pit,—an olfactory organ of nature of a small pit or hollow depression which later forms nasal passage.

olfactory spindle—sensory cell structure associated with olfactory nerve in antennule of decapod crustaceans lobus ophthalmicus.

oligacanthous (ōlēgāk'n'thūs) *a.* [Gk. *oligos* few *akanthos* spine.] Bearing few spines.

oligandrous (ōlēgān'drūs) *a.* [Gk. *oligos* few *aner* man.] Having few stamens oligoanemonous.

oligocarpous (ōlēgōkār'pūs) *a.* [Gk. *oligos* few *karpos* fruit.] Having few carpels.

Oligocene (ōlēgōsēn) *n.* [Gk. *oligos* few *kainos* recent.] A Tertiary

geological epoch between Eocene and Miocene.

oligodendroglia (ōlēgōdēn drōg'lā, -dēn drōg'lē'ā) *n. plur.* [Gk. *oligos* few; *dendron* tree *glia*, glue.] Adendritic neuroglia cells, oligoglia; oligodendrocytes mesoglia.

oligodynamic (ōlēgōdīnām'ik) *a.* [Gk. *oligos* few *dynamis* power.] Caused by small or minute forces functioning in minute quantities.

oligogene (ōlēgōjēn) *n.* [Gk. *oligos* few *gens* descent.] A qualitative gene or major mutant *appl.* poly gene.

oligogenic (ōlēgōjēn'ik) *a.* [Gk. *oligos* few *gens* descent.] Controlled by few genes responsible for major heritable changes, *appl.* characters.

ligoglia (ōlēgōglā, -lēgōglē'ā) *n.* [Gk. *oligos* few *glia*, glue.] Oligodendroglia.

ligolectic (ōlēgōlēk'tik) *a.* [Gk. *oligos* few *lectus* chosen.] Selecting only a few *appl.* insects visiting only few different food-plants or flowers.

oligomeric (ōlēgōm'ērūs) *a.* [Gk. *oligos* few *meros* part.] Having one or more whorls with fewer members than the rest.

olig n. plur. as (ōlēgōn'ērūs) *a.* [Gk. *oligos* few *nephros* kidney.] Having few Malpighian tubules *appl.* insects.

oligophagus (ōlēgōf'āgūs) *a.* [Gk. *oligos* few *phagēin* to eat.] Restricted to single order family or genus of food-plants, *appl.* insects of monophagous.

oligophyllate (ōlēgōfīlē'tik) *a.* [Gk. *oligos* few *phyllon* tribe.] Derived from few ancestral forms of monophyletic polyphyletic.

oligopod (ōlēgōpōd) *a.* [Gk. *oligos* few *pous* foot.] Furnished with few feet or legs campodeiform.

oligopyren (ōlēgōpīrēn) *a.* [Gk. *oligos* few *pyren* fruit-stone.] *Appl.* certain spermatozoa with reduced number of chromosomes.

ligo hi us (ōlēgōhī'zūs) *a.* [Gk. *oligos* few *hirs* root.] Having

- few roots *appl* certain marsh plants.
- oligospermous (ô'lgôspêr'mûs) *a.* [Gk. *oligos* few *sperma* seed.] Bearing few seeds.
- oligostemonous (ô'lgôstê'môn'ûs) [Gk. *oligos* few *stemon* thread.] Having few stamens oligandrous.
- oligotaxy (ô'lgô'tîk sî) *n.* [Gk. *oligos* few *taxis* arrangement.] Diminution in number of whorls.
- oligotokous (ô'lgô'tô'kûs) *a.* [Gk. *oligos* few *tokos* offspring.] Bearing few young.
- oligotrophic (ô'lgô'trôf'îk) *a.* [Gk. *oligos* little; *trophê* nourishment.] Providing or *part.* inadequate nutrition *opp* eutrophic.
- olistichezones (ôlîstîh'zônês) *plu* [Gk. *olistiche* sliding *zonê* girdle.] Regions of incomplete splitting of chromatids, possibly due to nucleic acid deficiency zones of differential reactivity.
- oliva (ôlîvâ) *live* (ôl'iv) [L. *oliva*, olive.] A prominence on each side of anterior end of medulla just below pons.
- olivary (ôlîvârî) *a.* [L. *oliva* olive.] *Part.* the olive, or olivary body *part.* certain nuclei of grey matter
- omacum (ô'mâ'kûm) *n.* [L. *omacum* pouch.] The pyloric or third division of ruminant stomach manplies.
- mbrophil (ô'm'b'rôfîl) *a.* [Gk. *ambros* rain *philein*, to love.] Adapted for rain, *appl* plants, leaves.
- omental (ô'mên'tîl) [L. *omentum* fold.] *Part.* omentum or omenta.
- omentum (ô'mên'tûm) *n.* [L. *omentum*, fold.] A fold of peritoneum either free or acting as connecting link between viscera.
- mmachrom *a.*—ommatochromes.
- ommateum (ô'mâ'tê'm) *n.* [Gk. *ommaton* hulk eye.] A compound eye.
- ommatidium (ô'm'âtîd'îûm) *n.* [Gk. *ommaton* little eye *idion* dim.] One of component elements of compound eye.

- ommatochromes (ô'm'âtôkrô'mz) *n plu* [Gk. *ommaton* eye *chroma* colour.] Eye pigments.
- ommatoids (ô'm'âtôîds) *n plu* [Gk. *ommaton* eye *eidos* form.] Two or four light-coloured spots on last abdominal segment of *Pedipalpi*,—of disputed function.
- mmatophor (ô'm'âtôfôr) *n.* [Gk. *ommaton*, eye *phorêin* to bear.] A movable process bearing an eye
- manicolous (ô'mnîl'r'ôîûs) *a.* [L. *omnis* all *color* t dwell.] Capable of growing on different substrata *appl* lichens.
- omnivorous (ô'mnîv'ôrûs) *a.* [L. *omnis* all *vorare* to devour.] Eating both animal and vegetable tissues.
- ombroid (ô'môîr'ôîd) *a.* [Gk. *ommos* shoulder *kyrtos* T shaped.] *Part.* shoulder and bryoid *appl.* muscle.
- omoideum (ô'môîd'îûm) *n.* [Gk. *ommos* shoulder *eidos* shape.] Pterygoid bone of bird skull.
- mostern (ô'môstêr'nûm) *n.* [Gk. *ommos* shoulder L. *sternum* breast bone.] Anterior element of amphibian sternum.
- omphalic (ô'mfâl'îk) *a.* [Gk. *omphalos* navel.] *Part.* the umbilicus.
- omphal genesis (ô'm fîlôjên'êîs) [Gk. *omphalos* navel *genesis* descent.] Development of the umbilical vesicle and cord.
- omphaloid (ô'm'fâlôîd) *a.* [Gk. *omphalos* navel *eidos* form.] Like navel having an umbilicus.
- omphalodium (ô'm'fâlôîd'îûm) *n.* [Gk. *omphalos* navel *idion* dim.] The scar at hilum of a seed, or hilum itself omphalodium.
- omphalomesenteric (ô'm fîlô'mês'tên'têr'îk, -mês-) *a.* [Gk. *omphalos* navel *mesenteron* mid-gut.] *Part.* umbilicus and mesentery *appl* veins, ducts.
- oncospher (ô'ng'kôsfêr) [Gk. *onchos* hook *sphaîra*, globe.] Larval stage of tapeworm preceding cysticercus proscotex or six hooked embryo stage of *Cestoides*.

- ontocycl (ón'tsál'kl) *n* [Gk. *on* being *kyklos* circle.] Evolution which in its later stages tends to produce forms exactly like those in the early stages.
- ontogenesis (ón'tsjén'tsís) *ontogeny* (ón'tsjén'tsís) *n* [Gk. *on* being *genesis* descent.] The history of development and growth of an individual of phylogeny.
- o togenetic (ón'tsjén'tsík) *n* [Gk. *on* being *genesis* descent.] *Part* ontogeny or development of individual.
- onychí *m* (ón'ík'tóm) *n*. [Gk. *onyx* nail.] The layer below the nail a pulvillus a special false articulation to bear claws at end of tarsus in some spiders.
- nychogení (ón'ík'sjén'tík) *n*. [Gk. *onyx* nail *genes* producing] Capable of producing a nail or nail-like substance *egg* material in nail matrix and cells forming fibrous substance and cuticula of hairs.
- oöopogamy (ó'ópóg'amí) *n*. [Gk. *oö* egg *opo* way *genes* marriage.] Diploid or somatic parthenogenesis.
- oöblast *ma* (ó'ób'lás'téms) *n* [Gk. *oö* egg *blastos* bud] The egg after fertilization.
- oöcarp (ó'ókárp) *n*. [Gk. *oö* egg *karpas* fruit.] Oöspore.
- oöcyst (ó'ótsít) *n* [Gk. *oö* egg *kystis* bladder] Cyst formed round two con] gating gametes in Sporozoa pseudomicrocista.
- oöcyte (ó'ósk) *n*. [Gk. *oö* egg *kystis* hollow] An egg before formation of first polar body in protozoa stage in female conjugant before it prepares for fertilization.
- oöcytin (ó'ótsít) *n* [Gk. *oö* egg *kystis* hollow] Substance extracted from spermatozoa which has fertilizing and agglutinating effect on ova of same species.
- oöci *m* (ó'ótsím) *n* [Gk. *oö* egg *oikos* house] An ovicell or brood pouch.
- oögamete (ó'ógámét) *n* [Gk. *oö* egg *genes* marriage.] A co-sphere of Sporozoa.
- oögamous (ó'óg'amús) *n*. [Gk. *oö* egg *genes* marriage.] Having sexually differentiated gametes *part* oögamý.
- oögamý (ó'óg'amí) *n* [Gk. *oö* egg *genes* marriage.] The union of a non-motil femal gamete or egg-cell and a male gamete.
- oögenesis (ó'ójén'tsís) *n* [Gk. *oö* egg *genesis* descent.] Formation, development and maturation of female gamete or ovum.
- oöglósa (ó'óg'lá) *n*. [Gk. *oö* egg *glais* glue.] Egg cement.
- oögoná, —oögoníum.
- oögoníal (ó'ógón'ál) *n*. [Gk. *oö* egg *gonos* begetting] *Part* the oögoníum.
- oögoníum (ó'ógón'íum) *n* [Gk. *oö* egg *gonos* begetting] The female reproductive organ in certain thallophytes the mother egg-cell.
- oöid (ó'óid) *n*. [Gk. *oö* egg *oides* form.] Egg-shaped oval.
- oökin *sis* (ó'ókin'sis) *n*. [Gk. *oö* egg *kinesis* to move.] The karyokinetic stages of nucleus in maturation and fertilization of eggs.
- oökinete (ó'ókinét) *n*. [Gk. *oö* egg *kinesis* to move.] The motile worm-shaped stage of the zygote in certain protozoa.
- oölemma (ó'ólémm) *n* [Gk. *oö* egg *lemma* husk.] The vitelline membrane of an egg the zona pellucida.
- oölogy (ó'óljí) *n* [Gk. *oö* egg *logos* discourse.] The study of eggs, particularly those of birds.
- oöphor (ó'ófor) *n* [Gk. *oö* egg; *phoros* to bear] Ovary oöphyte *part* oöphoridí *m* (ó'ófor'idí) *n*. [Gk. *oö* egg *phoros* to bear *lithos* dim] The megasporangium in certain plants.
- oöphyt (ó'ófor) *n* [Gk. *oö* egg *phytos* plant.] The sexual generation such plants as liverworts gametophyte.
- oöplasm (ó'óplásm) *n* [Gk. *oö* egg *plasma*, mould] Cytoplasm or cell substance of an egg.

opod (o'pōd) *n.* [Gk. *oōn* egg  
*pod* foot.] A component part of  
wing or ovipositor.

oporphyrin (ō pōr'firin) *n.* [Gk.  
*oōn* egg *porphyrōs* purple.] A  
pigment of egg-shell of birds  
haematoporphyrin.

oosom (ō'ōsōm) [Gk. *oōn* egg  
*sōma*, body.] Spherical body in  
egg supposed to pass later to germ-  
cells germ track determinant or  
polar plasm.

oosperm (ō'ōsperm) *n.* [Gk. *oōn*,  
egg *sperma*, seed.] A fertilized  
egg.

oosphere (ō'ōsfer) *n.* [Gk. *oōn* egg  
*sphaērōs* globe.] An egg before  
fertilization femal gamete.

oospore (ō'ōspor) *n.* [Gk. *oōn*, egg  
*spora*, seed.] The zygote or fer-  
tilized egg-cell encased zygote in  
certain protozoa.

oostegite (ō'ōstēgē) *n.* [Gk. *oōn*,  
egg *stēgē* roof.] A plate-like  
structure on basal portion of the  
acic limb in certain Crustacea,  
which helps to form receptacle for  
the egg.

oostegopod (ō'ōstēg'ōpōd) *n.* [Gk.  
*oōn* egg; *stēgē* roof *pod* foot.]  
A thoracic foot bearing an oostegite.

ootheca (ō'ōthē'ka) [Gk. *oōn*, egg  
*thēkē* case.] A sporangium an  
egg-case, as in insects.

ootid (ō'ōtid) *n.* [Gk. *oōn* egg  
*idēs* idem.] On analogy of sperm  
and, one of four parts into which  
egg divides at maturation.

ootocoid (ō'ōtōkōid) *n.* [Gk. *oōn*  
egg *tōkōs* delivery *oidēs* form.]  
Carving birth to young at very  
early stage and then carrying them  
in marupium.

ootocus (ōōt kōs) *n.* [Gk. *oōn* egg  
*tōkōs* delivery.] Egg-laying.

ootype (ō'ōtip) *n.* [Gk. *oōn* egg  
*typos* mould.] Part of oviduct  
receiving ducts from shell- and  
yolk-glands, in flat worms.

ooze (ōoz) *n.* [A.S. *weaz* mud.] A  
deposit containing skeletal parts  
of minute organisms and covering  
large areas of ocean bottom soft  
mud.

oo oit (ō'ōō'it) [Gk. *oōn* egg  
*oōn*, animal.] Asexual parent, in  
tunicates.

ooxoid (ō'ōōid) *n.* [Gk. *oōn* egg  
*oōn* animal *oidēs* form.] Any  
individual developed from an egg  
percula, — *pl.* of operculum  
percular (ōpēr'kūlār) *n.* [L. *oper-  
culum* lid.] Posterior bone of fish  
operculum. *a.* Part operculum  
*appl.* denoting antieridial cell  
as in ferns.

perculate (ōpēr'kūlāt) *a.* [L. *oper-  
culum* lid.] Having lid as the  
capsule of mosses calyptrate  
having covering for gills as most  
fishes operculiferous.

operculliform (ōpēr'kūlū'fōrm) *n.* [L.  
*operculum* lid *forma*, shape.]  
lid-like.

perculige ous (ōpēr'kūlī'fōrm) *a.*  
[L. *operculum* lid Gk. *gennētēs*  
to produce.] Producing or forming  
a lid.

perculum (ōpēr'kūlūm) *n.* [L. *oper-  
culum* lid.] A lid or covering  
flap, as at apex of an ossem, or  
capsules of mosses convolution  
covering island of Reil gill-cover  
of fishes flap covering of nostrils  
and ear in some birds lid-like  
structure or epiphragm closing  
mouth of shell in some gastropods  
movable plates in shell of barnacle  
first pair of abdominal appendages  
in Limulus and scorpions small  
plate covering opening of lung  
book in spiders chitinous lid of  
orifice in Polyzoa.

opasia (ōpā'siā) *n.* [Gk. *ops* hole.]  
Membranous aperture below orifice  
in Polyzoa.

ophiocephalous (ō'fōkēf'ālūs, -ēf)  
*n.* [Gk. *ophis* serpent *kephalē*  
head.] *Appl.* larval pedicellariae  
of echinoderms.

ophiopluteus (ō'fōploot'ētūs) *n.* [Gk.  
*ophis* serpent L. *pluteus* shed.]  
The pluteus larva of Ophiuroidea.

ophiuroid (ōfū rōid) *n.* [Gk. *ophis*  
serpent *oōn*, tail *oidēs* form.]  
Resembling or part brittle-star  
*appl.* cells, multiradiate spiculate  
scleroids astrocleroids.

- ophryon (ôfr'ôn) *n.* [Gk. *ophrys* brow] Point of junction of median line of face with a line across narrowest part of forehead.
- ophthalmic (ôfthâl'mîk) *a.* [Gk. *ophthalmos* eye.] *Part.* eye *appl.* division of trigeminal nerve *appl.* an artery arising from internal carotid *appl.* inferior and superior veins of orbit.
- opisthaptor (ôpsthâp'tô) *n.* [Gk. *opisthe* behind *haptain* to fasten.] Posterior sucker or disc in trematodes.
- opisthial (ôpsthîâl) *a.* [Gk. *opisthe* behind.] Posterior *appl.* pore or stomatal margin.
- opisthion (ôpsthîôn) *n.* [Gk. *opisthe* behind.] Median point of posterior margin of foramen magnum.
- opisthocelous (ôpsthô'sêl'ûs) *a.* [Gk. *opisthe* behind *cellos* hollow] Having the centrum concave behind *appl.* vertebral base.
- opisthodetic (ôpsthô'dê'tîk) *a.* [Gk. *opisthe* behind *detos* bound.] Lying posterior to beak or umbo *appl.* ligaments in some bivalve shells of parvicular
- opisthoglossal (ôpsthôg'lô'sâl) *a.* [Gk. *opisthe* behind *glossa* tongue.] Having tongue fixed in front free behind
- opisthognathous (ôpsthôg'nâthôs) *a.* [Gk. *opisthe* behind *gnathos* jaw] Having retreating jaws.
- opisthonephros (ôpsthô'nêf'rô's) *n.* [Gk. *opisthe* behind *nephros* kidney] A renal organ of embryo consisting of meso- and metanephric series of tubules
- opisthosoma (ôpsthô'sô'mâ) *n.* [Gk. *opisthe* behind *soma* body] Posterior body region, as in Trilobita and Arachnoides.
- opisthotic (ôpsthô'tîk) *a.* [Gk. *opisthe* behind *otis* ear] *Part.* inferior posterior bony element of otic capsule.
- opisthure (ôpsthûr) *n.* [Gk. *opisthe* behind; *ura* tail] The projecting tip of vertebral column
- opponens (ôpô'nêns) *a.* [L. *opponere* to oppose.] *Appl.* muscles which cause digits to approach one another
- opposite (ôp'ôzît) *a.* [L. *opponere* to oppose.] *Appl.* leaves which are opposite one another at same level on stem.
- opsonic (ôpô'nîk) *a.* [Gk. *opsonere* to cater] *Part.* or affected by opsonin bacteriotropic.
- opsonin (ôpô'nîn) *n.* [Gk. *opsonere* to cater] A constituent of blood which helps phagocytes to destroy invading bacteria bacteriotropic.
- optic (ôp'tîk) *a.* [Gk. *opsis* sight.] *Part.* vision.
- ptic axis,—line between central points of anterior and posterior curvature or poles of eye ball.
- optic bulb,—peripheral expansion of the embryonic optic vesicle, later invaginated to form the optic cup which gives rise to the retina.
- optic disc,—region of entrance of optic nerve in retina blind spot.
- ptil lobes,—part of brain intimately connected with optic tracts, corpora bigemina, *q.v.*
- ptilic rod—rhabdome *q.v.*
- opticochiliary (ôp'tîkô'chîl'î) *a.* [Gk. *opsis* sight L. *ocula* eyeballs.] *Part.* optic and ciliary nerves.
- opticon (ôp'tîkôn) *n.* [Gk. *opsis* sight.] Inner zone of optic lobes of insects.
- optileopillary (ôp'tîlo'ôp'îl'î) *a.* [Gk. *opsis* sight L. *pupilla* pupil of eye.] *Part.* optic nerve and pupill.
- optimum (ôp'tîmûm) *n.* [L. *optimus* best.] The most suitable degree of environmental fact for full development of organism concerned point at which best response can be obtained
- optocoel (ôp'tô'sêl) *n.* [Gk. *opsis* sight *cellos* hollow] The cavity in optic lobes of brain.
- optogram (ôp'tôgrâm) *n.* [Gk. *opsis* sight *graphein* to write] The image impressed on retina by action of light on visual purple.
- ora,—mouths *plur.* of ora
- ora serrata,—wavy border of retina, where nervous elements cease

oral (ô'ral) [L. *or* mouth.] *Part* or belonging to mouth on side on which mouth lies.

orbicular (ôrbik'ulâr) *a.* [Gk. *orbis* orb] Round or shield-shaped with petiole attached to centre *appl.* leaves surrounding *appl.* eye muscles annular *appl.* ligament of head of radius

orbiculari (ôrbik'ulârî) *a.* [L. *orbis* orb] *Appl.* muscle whose fibres surround an opening

orbiculate (ôrbik'ulât) *a.* [L. *orbis* orb] Nearly circular in outline *appl.* leaves.

orbit (ôrbî) *n.* [L. *orbis*, circuit.] Bony cavity in which eye is situated skin round eye of bird hollow in arthropod cephalothorax where eye-stalk arises.

orbital (ôrbî'al) *a.* [L. *orbis*, circuit.] *Part* the orbit.

orbitomalar (ôrbî'tômâlâr) *a.* [L. *orbis*, circuit *malus*, cheek] *Part* orbit and malar bone

orbitonasal (ôrbî'tômâl'sâl) *a.* [L. *or* *bis*, circuit *nasus* nose.] *Part* orbit and nasal portions of adjoining bones.

orbitoceph noid (ôrbî'tî'fêf noid) *a.* [L. *orbis*, circuit Gk. *phos* wedge; *oides* form.] *Part* paired cranial elements lying between preopercoid and frontal.

orchid (ôrkî'tik) *a.* [Gk. *orchis* testis.] Testicular *part* testicle.

order (ôrdêr) [L. *ordo* order] In classification, group of organisms closely allied, ranking between family and class.

ordinate (ôrdî'nât) *a.* [L. *ordinatus* arranged.] Having markings arranged in rows.

ordinatopunctat (ôrdî'nâ'tîpûng'kîkt) *a.* [L. *ordinatus* arranged *punctum* prick.] Indicating serial presence of dots, etc.

Ordovician (ôrdôvî'ab'îshn) *a.* [L. *Ordovices* tribe of North Wales.] *Part* or *appl.* period of Palaeozoic era between Cambrian and Silurian.

organ (ôr'gân) *n.* [Gk. *organon* implement.] Any part or structure of an organism adapted for special function functions

organ ? Corti, or organon spirale — Corti's organ *q.v.*

organ ? Vale cl n es,—paired lamellated organ in female nautilus.

organelle (ôrgânêl'ê) *n. plur* [Gk. *organon* instrument.] The various parts of cell organoids.

organi (ôrgân'ik) *a.* [Gk. *organon*, instrument.] *Part* derived from or showing the peculiarities of living organism.

organicism (ôrgân'îzîsm) *n.* [Gk. *organon* instrument.] The co-operation or competition of cells, tissues, and organs and their reciprocal modifying action the integration of an organism as unit the interblending of events within the organism.

organific (ôr'gânîf'ik) *a.* [Gk. *or* *ganon* instrument L. *facere* to make.] Producing an organism making an organised structure.

organised (ôr'gânîzd) *a.* [Gk. *organon*, instrument.] Exhibiting characteristics of or behaving like an organism *appl.* growth resembling normal growth, in tissue culture *opp.* unorganised growth of cells migrating from cut tissue

organiser (ôr'gânîzêr) *n.* [Gk. *or* *ganon* fashioning] A part of an embryo which provides stimulus for the direction of morphological development and differentiation of other parts of ovulator

organism (ôr'gânîzîsm) *n.* [Gk. *or* *ganon*, instrument.] Any living animal or plant anything capable of carrying on life processes.

organismal (ôr'gânîs'mîk) *a.* [Gk. *organon* instrument.] *Appl.*, or *part.* factors or processes involved in integrating and maintaining individuality of an organism.

organogen (ôr'gânîjên) [Gk. *organon*, instrument *gennesis* to produce.] Any of the elements C, H, O, N also S, P, Cl.

organogenesis (ôr'gânîjên'ôsis) *n.* [Gk. *organon* instrument *gennesis* descent.] Formation and development of organs organogeny

**organography** (ô gănôgrăfî) *n* [Gk. *organon* instrument *graphô* to write.] The description of organs in a living organism.

**organoid** (ôrgănoid) *n* [Gk. *organon*, instrument *eidos* form.] A formed morphological element in protoplasm cell organ. *Opp* metaplasm.

**organ I ptic** (ôrgănolêptîk) *a*. [Gk. *organon* instrument *lambanô* to take hold of.] Capable of receiving or of making an impression.

**organonomy** (ôrgănônômî) *n*. [Gk. *organon*, instrument *nomos* law.] The laws that deal with life or living organisms.

**organonymy** (ôrgănônimî) *n*. [Gk. *organon* instrument *onymos* name.] The nomenclature of organs.

**organophyly** (ôrgănôfilî) *n* [Gk. *organon* instrument *phylê* tribe.] The phylogeny of organs.

**organ trophic** (ôrgănôtrôfîk) *a*. [Gk. *organon* instrument *trophô* to nourish.] *Part* formation and nourishment of organs.

**organotypi** (ôrgănôtipîk) *a* [Gk. *organon* instrument *typos* pattern.] *App* growth order somatic control organized *Opp* histotypic

**organule** (ôrgănulî) *n* [L. *organum* instrument.] A cell or element of an organism or of an organ.

**gasm** (ôrgăzm) *n* [Gk. *argos* to swell.] Immoderate excitement turgescence of an organ.

**Oriental** (ôriên'tâl) *a*. [L. *orientalis* eastern.] *App* or *part* zoogeographical region including India Ceylon Indo-China + Malaya and East Indies eastwards to Roma.

**orientatio** (ô riên'tâ shûn) *n*. [L. *orientis* rising of su.] Alteration in position shown by organs or organisms under stimulus relative disposition arrangement of chromosomes with centromeres lying axially in relation to spindle.

**orifice** (ôr'ifis) *n* [L. *as* mouth *facere* to make.] Mouth or per-

ture opening of tube duct, etc. orificium.

**original** (ôrîj'inal) *a* [L. *origo* origin.] *Part* beginning *app* wild species from which cultivated have been derived.

**ornis** (ôr'nis) *n* [Gk. *ornis* bird.] Bird fauna of a region avifauna.

**ornithic** (ôrnîth'îk) *a* [Gk. *ornis* bird.] *Part* birds.

**ornithichnitis** (ôr'nîthik nî) *n* [Gk. *ornis* bird *ichnos* track.] The fossil track or foot print of a bird.

**ornithine** (ôr'nîthin) *n* [Gk. *ornis*, bird.] Diamino-valeric acid, found in excreta of birds  $C_5H_{13}O_2N_2$ .

**ornithocopros** (ôr'nîthôkôp rôs) *n* [Gk. *ornis* bird *kopro* dung.] The dung of birds.

**Ornithoga** *a* (ôr'nîthôgâ) *n* [Gk. *ornis* bird *gaia* earth.] The zoogeographical region which includes New Zealand and Polynesia.

**ornithology** (ôr'nîthôlôjî) *n*. [Gk. *ornis* bird *logos* discourse.] The study of birds.

**ornithophilous** (ôr'nîthôfilôs) *a*. [Gk. *ornis* bird *philia* to love.] Bird loving *app* flowers pollinated through agency of birds.

**oroanal** (ô rôd nâl) *a*. [L. *as* mouth *anus* anus.] Serving as mouth and anus.

**oronasal** (ô rônl nâl) *a*. [L. *as* mouth *nasus* nose.] *Part* or designating groove connecting mouth and nose.

**orthaxial** (ôrth âkîâl) *a* [Gk. *orthos* straight L. *axis* axle.] With straight axis vertebral in *app* caudal fin.

**orthochromatic** ôr'thôkrômât'îk) *a*. [Gk. *orthos* straight *chroma*, colour.] *App* large oval erythrocytes with nuclear strands passing out to nuclear membrane.

**orthodontin** (ôr'thôdôn'tin) *n* [Gk. *orthos* straight L. *dons* tooth.] Dentine pierced by umeroos more or less parallel dentinal tubules inner layer of circumpulpar dentine and outer layer of palatal dentine / osteodentine

orthoe t ri (ôr'thœntér'ik) *a.* [Gk. *orthos* straight *entron* intent *c.*] Having alimentary canal along internal ventral body surface *appl.* certain Tunicata.

orthogenesis (ôr'thêjên êds) *n.* [Gk. *orthos* straight *genesis* descent.] Evolution in definite direction determinat evolution through variations which irrespective of natural selection or external forces gradually produce new and distinct type.

orthokinesis (ôr'thêkînêsis) *n.* [Gk. *orthos* straight *kinesis* movement.] Variation in velocity causing dispersal or aggregation of animals as result of different stimuli variation in linear velocity

orthophyte (ôr'thêf) *n.* [Gk. *orthos* straight *phyton*, plant.] The plant in the interval between megaspore and megaspore production sporophyte and gametophyte

orthoploid (ôr'thêplôid) [Gk. *orthos* straight *haploos* onefold *eidos* form.] With even chromosome number polyploid with complete and balanced genomes.

orthopteron (ôr'thêptérôn) [Gk. *orthos* straight *pteron*, wing.] Having straight folded posterior wings, as grasshoppers.

orthoradial (ôr'thêrêdîal) *a.* [Gk. *orthos* straight *L. radius* ray.] *Appl.* cleavage where divisions are symmetrically disposed round egg-axis.

orthoselection (ôr'thêsêlêk'shôn) *n.* [Gk. *orthos* straight *L. selectio* choice.] Selection conducive to advance in adaptation.

orthospermous (ôr'thêspêr'mis) *a.* [Gk. *orthos* straight *sperma*, seed.] With straight seeds.

orthospiral (ôr'thêspîr'al) *a.* [Gk. *orthos* straight *sphera* coll.] *Appl.* coiling of parallel chromatids interlocked at each twist plectonemic. *Opp.* anorthospiral, paranemic.

orthostichous (ôr'thêstîkôs) *a.* [Gk. *orthos* straight *stichos* row.] Arranged in vertical row *appl.*

leaes *appl.* in skeleton when peripheral somatids are parallel.

orthostichy (ôr'thêstîkî) *n.* [Gk. *orthos* straight *stichos* row.] Vertical line on which row of leaves or scales is found arrangement of leaves or scales in this row

orthotriaxen (ôr'thêtrîf'ân) *n.* [Gk. *orthos* straight *triaxos* trident.] A triaxene with cladi directed outwards at right angles to shaft.

orthotropic (ôr'thêtrôp'ik) *a.* [Gk. *orthos* straight *trope*, turn.] Tending to be orientated in line of action [stimulus; growing vertically as stem or root. *Opp.* plagiotropic.

orthotropism (ôr'thêtrôptâm) *n.* [Gk. *orthos* straight *trope* turn.] Growth in vertical line condition of an orthotropic plant organ.

orthotropous (ôr'thêtrôp'ôs) *a.* [Gk. *orthos* straight *trope* turn.] Having chalaza, hilum, and micropyle in straight line *appl.* ovules atropous.

orth type (ôr'thêtip) *n.* [Gk. *orthos* straight *typos* pattern.] Genotype originally designated.

oryctes (ôr'ik tîs) *n.* [Gk. *oryktos* dug out.] The study of fossils paleontology

os (ôs) *n.* ora (ôr'a) *plu.* [L. mouth.] A mouth mouths.

os (ôs) *n.* ossa (ôs'a) *plu.* [L. os bone.] A bone bones.

ocula,—*plu.* of oculum

oculant (ôs'kulânt) [L. *oculans* looking.] Closely adherent intermediate in character between two groups, genera, or species.

ocular (ôs'kulâr) *a.* [L. *oculum* small mouth.] Pert. an oculum.

oculate (ôs'kulât) [L. *oculatus* to look.] To have characters intermediate between two groups.

oculiferous (ôs'kulîf'êr'us) *a.* [L. *oculum* small mouth *ferre* to bear.] Having ocula.

oculum (ôs'kulûm) *n.* [L. *oculum* small mouth.] An excurrent opening in sponge



**osmeterium** (ôs mêtê rîûm) *n* [Gk. *osme* smell *terain* to keep.] A forked protrusible organ borne on first thoracic segment of larva of some butterflies, emitting a smell.

**osmics** (ôs mîks) *n* [Gk. *osme* smell.] The study of organs and sense of smell and of odoriferous organs and substances.

**osmophil** (ôs mîôfil) *n*. [Osmium from Gk. *osme* smell *philein* to love.] Staining readily with osmic acid as olein in tissues, and as externalum of Golgi bodies **osmophilic**.

**osmorec ptors** (ôs môrtêp'tôrz) *n*. *plu*. [Gk. *osmos* impulse L. *receptus* to receive.] Cells reacting to osmotic changes in blood and via parasympathetic fibres innervating the posterior lobe of pituitary gland controlling secretion of the antidiuretic hormone

**osmoals** (ôs mô'ôls) *n* [Gk. *osmos* impulse.] A diffusion which takes place between two miscible fluids through a permeable membrane.

**osmosis** (ôs mô'siûm) *n* [Gk. *osmos* impulse.] The part of nematode intestine connecting with dermian vessels.

**osmotaxis** (ôs mô'tâk sis) *n*. [Gk. *osmos* impulse *taxis* arrangement.] Locomotory response to changes in osmotic pressure **osmotaxis**.

**osmotic** (ôs mô'tik) [Gk. *osmos* impulse] *Peri* osmosis.

**osmyl** (ôs mîl) *n*. [Gk. *osme* smell *lyle* matter] Any odorous substance

**osphradium** (ôsfrâ diûm) [Gk. *osphradion* strong scent.] A chemical sense organ associated with visceral ganglia in molluscs

**osphresiology** (ôs'frêsiôl'ôjî) *n*. [Gk. *osphresis* sense of smell *logos* discourse] The study of the sense of smell.

**osphresi** (ôs frê'sis) [Gk. *osphresis* sense of smell] The sense of smell.

**ossa**,—bones *plu* of *os*.

**ossa triquetra**,—Wormian bones.

**ossain** (ôs ôin) *n* [L. *osseus* bony] The most abundant organic constituent of bone **bone collagen**.

**ossous** (ôs ôis) *n* [L. *osseus* bony] Composed of or resembling bone.

**ossici** (ôs'îkî) *n* [Dim of L. *os* bone.] Any small bone one of those in ear *r* in sclerotic *os* of those in gastric mill of Crustacea plate of sea urchin's test.

**ossico** *s* (ôs'îkôn) *n*. [L. *os* bone *osseus* conc.] The *os corne* or horn core, *g*.

**ossicular** (ôs'îk'ulâr) *s* [L. *os* bone.] *Peri* ossicles.

**ossicul** *m* (ôs'îk'ûlûm) *n*. [L. *os* bone.] An ossicle a lithodermis a partly calcified byssus a pyrene.

**ossification** (ôs'îfikâ'shûn) *n*. [L. *os* bone *facere* to make.] The formation of bone replacement of cartilage by bone.

**ossify** (ôs'îfî) [L. *os* bone *ferri* to become.] To change to bone

**osteoblast** (ôs'têôblâst) *n*. [Gk. *osteon* bone *blastos* bud.] A bone forming cell.

**osteoch adral** (ôs'têôkôn drâl) *s* [Gk. *osteon*, bone *chondros* cartilage.] *Peri* bone and cartilage **osteochondrous**, consisting of bone and cartilage.

**osteoclast** (ôs'têôklâst) *n* [Gk. *osteon* bone *klaos*, to break.] A cell which absorbs or breaks up bony tissue or cartilage matrix.

**osteocomma** (ôs'têôkôm'â) *n* [Gk. *osteon* bone *komma* piece.] A segment of the vertebral skeleton.

**ost ocranium** (ôs'têôkrâ niûm) *n* [Gk. *osteon* bone *okranion* skull.] Bony skull as distinguished from cartilaginous or chondrocranium.

**osteocyte** (ôs'têôsit) *n* [Gk. *osteon* bone *kytos* hollow] A bone cell, developed from osteoblast.

**ost od nti** (ôs'trôdên'tî) *n*. [Gk. *osteon* bone L. *dens* tooth.] A variety of dentine which closely approaches bone in structure.

**osteodermis** (ôs'têôdêr'mîs) *n* [Gk. *osteon* bone *dermis* skin.] A dermis which is more or less ossified **bony dermal plate**.

ost ogen (ô'stôjên) *n*. [Gk. *ostion* bone *genesis* to produce.] The tissue which alters and forms bone.  
 osteogenesis (ô'stôjên êzh) *n*. [Gk. *ostion* bone *genesis* descent.] Bone formation.  
 osteog enic (ô'stôjênê'tik) osteo genic (ô'stôjên'ik) *a*. [Gk. *ostion* bone *genesis* descent.] *Part* causing formation of bone.  
 osteoid (ô'stôid) *a*. [Gk. *stion* bone *eidos* form.] Bone-like.  
 osteology (ô'stôlôjî) *n*. [Gk. *ostion*, bone *logos* discourse.] That part of zoology dealing with structure, nature, and development of bones.  
 osteoplastic (ô'stôplê'stik) *a*. [Gk. *stion*, bone *plastos* moulded.] Producing bone *appl.* certain cells.  
 osteoscleroid (ô'stôsklê'rôid) *n*. [Gk. *stion* bone *scleros* hard *eidos* shape.] A sclerid with both ends knobbed.  
 osteosclerite (ô'stôsklê'ti) *n*. [Gk. *stion*, bone *L. sclerum* shield.] A bony external scale or plate, as in labyrinthodonts and armadillos.  
 ostiate (ô'stî't) *a*. [L. *ostium* door.] Furnished with ostia.  
 ostiolar (ô'stîô'lar) *a*. [L. *ostiolum* little door.] *Part* an ostiole.  
 ostiolate (ô'stîô'lê't) *a*. [L. *ostiolum* little door.] Provided with ostioles.  
 ostiel (ô'stî'el) *n*. [L. *ostium* little door.] Opening of conopeckle, perithecium, stoma, anther sac imbalant aperture of sponge  
 ostium (ô'stî'um) *n*. ostia (ô'stî'a) *pl.* [L. *ostium* door.] Any mouth-like opening openings of Fallopiian tubes opening in arthropod heart by which blood enters from pericardium opening from flagellate canal into paragastric cavity in sponges.  
 otic (ô'tik) *a*. [Gk. *ous* ear.] *Part* ear *part* region of auditory capsule *appl.* ganglion on mandibular nerve.  
 otidium (ô'tî'dî'um) *n*. [Gk. *ous* ear *idion* dim.] The otocyst of mollusc.  
 otoconium (ô'tôkôn'ium) *n*. [Gk.

*ous* ear *konos*, sand.] One of minute crystals of calcium carbonate found in membranous labyrinth of inner ear ear dust otoconite.  
 otocrypt (ô'tôkript) *n*. [Gk. *ous* ear *kryptos* hidden.] An open invagination of integument of foot in certain molluscs.  
 otocyst (ô'tôkist) *n*. [Gk. *ous* ear; *hystis* bladder.] A sac containing fluid and otoliths supposed to be auditory embryonic auditory vesicle.  
 otolith (ô'tôlith) *n*. [Gk. *ous* ear *lithos* stone.] Calcareous particle or plate like structure found in auditory organ of many animals.  
 oto-occipital (ô'tôôkîp'itâl) *n*. [Gk. *ous* ear *L. occipus* back of head.] Bone formed by fusion of opisthotic with exoccipital.  
 otorporus (ô'tôpôr'pê) *n. pl.* [Gk. *ous* ear *poros* brooch.] Stripes of cnidoblasts on exumbrella of Hydromedusae.  
 otosalpinx (ô'tôsal'pîngks) *n*. [Gk. *ous* ear *salpinx* trumpet.] Tube androva or Eumachian tube.  
 otostapes (ô'tôstâpêz) *n*. [Gk. *ous* ear *L. L. stapes* stirrup.] Otic portion of columellar primordium which in adult may give rise to stapes and part of columella.  
 otosteon (ô'tôstêon) *n*. [Gk. *ous* ear *stion* bone.] An auditory ossicle.  
 ova.—*pl.* of ovum.  
 oval (ô'vâl) *a*. [L. *ovum* egg.] Egg shaped *part* an egg  
 ovalbumin (ô'vâlbû'mîn) *n*. [L. *ovum* egg *albumen*, white of egg.] The chief protein constituent of white of egg  
 ovarian (ô'vârîân) *a*. [L. *ovarium* ovary.] *Part* an ovary  
 ovaricle (ô'vârîkl) [L. *ovarian* ovary.] Egg tube of insect ovary  
 ovariotestis (ô'vârîô'tê'stis) *n*. [L. *ovarium* ovary *testis* testicle.] Generative organ when both male and female elements are formed, as in case *fox* reversal of ovotestis  
 ovarium (ô'vârîûm) *n*. [L. *ovarium* ovary.] An ovary

**ovary** (ô'vârî) *n* [L. *ovari* in ovary] The essential female reproductive gland, an enlarged portion of pistil or gynoecium, containing ovules.

**ovate** (ô'vât) *a*. [L. *ovum* egg] Egg-shaped and attached by broader end, *appl* leaves.

**ovate-acuminate**,—*appl* an vat lamina with very sharp point *appl* leaves.

**ovate-ellipsoid**,—ovate approaching ellipsoid *appl* leaves.

**ovate-lanceolat**—having a form of lamina intermediate between ovate and lanceolate.

**ovate-oblong**—having an oblong lamina with one end narrower

**ovaj cter** (ô'âjêk'tôr) *n*. [L. *ovum* egg *ejactio* thrown out.] The muscular terminal part of female genital tract considered as functional unit, in nematodes.

**ov nchyma** (ô'veng'kind) *n* [L. *ovum* egg Gk. *enchyma* infusion.] A connective tissue with ovoid cells.

**ovicell** (ô'vîêl) *n*. [L. *ovum* egg *cella* cell.] A dilatation of an oocytum serving as brood pouch.

**ovid cal** (ô'vidôkâl) *n*. [L. *ovum* egg *ducere* to lead.] Part oviduct.

**ovid ct** (ô'vidôkt) *n*. [L. *ovum* egg *ducere* to lead.] The tube which carries eggs from ovary to exterior Müllerian duct.

**ovif ous** (ô'vîf'êrôs) *a* [L. *ovum* egg *ferre* to carry] Serving to carry eggs ovigerous.

**oviform** (ô'vîfôr) *a*. [L. *ovum* egg *forma*, shape.] Egg-shaped oval

**ovig** (ô'vîjêr) *n*. [L. *ovum* egg *gerere* to bear] Egg-carrying leg of Pycnogonida.

**oviparity** (ô'vîpâr'itî) *n*. [L. *ovum* egg *parere* to bring forth.] Condition of being oviparous.

**oviparous** (ô'vîpâr'ôs) *a*. [L. *ovum* egg *parere* to bring forth.] Producing eggs egg-laying of viviparous ovoviviparous.

**oviposit** (ô'vîpôz'it) *v* [L. *ovum* egg *ponere* to place] To lay eggs *appl* insects.

**ovipositor** (ô'vîpôz'itôr) *n*. [L. *ovum*

**egg ponere** to place] A specialized structure in insects for placing eggs in a suitable place, a tubular extension of genital orifice in fishes.

**ovisac** (ô'vîsâk) *n* [L. *ovum* egg *saccus* bag] An egg-capsule or receptacle.

**oviscapte** (ô'vîskâpt) *n* [L. *ovum* egg *F capter* from L. *capere* to conduct] Ovipositor

**ovism** (ô'vîzm) *n* [L. *ovum* egg] Theory held by ovists that the egg contained the germ with germs of all future generations within it.

**ovocentre** (ô'vôsn'têr) *n*. [L. *ovum* egg *centrum* centre.] The egg-centrosome during fertilisation.

**ovocyst**, **ovocyte**, **ovogenesis**,—oocyst, oocyte, oogenesis, *ov*

**ovoid** (ô'vôid) *a*. [L. *ovum* egg Gk. *oides* form.] Somewhat egg-shaped.

**ovomucoid** (ô'vômû'kôid) *n*. [L. *ovum* egg *mucus* mucus; Gk. *oides* form.] A mucoid of eggs.

**ovotestis** (ô'vôtêr'tîs) *n*. [L. *ovum* egg *testis* testicle.] The hermaphrodite reproductive gland of certain gastropods.

**ovoviviparous** (ô'vôvivîpâr'ôs) *a*. [L. *ovum* egg *vivere* living *parere* to bring forth.] Part forms which produce an egg with definite shell, which hatches in maternal body of oviparous, viviparous.

**ovulate** (ô'vûlâr) *a*. [L. *ovum* egg] Containing an egg o ovule To emit egg or eggs from ovary or ovarian follicles.

**ovulation** (ô'vûlâshôn) *n* [L. *ovum* egg *latum* borne way] The emission of the egg or eggs from the ovary

**ovulatory** (ô'vûlâtôrî) *a* [L. *ovum* egg *latum* born way] Part ovulation.

**ovule** (ô'vûl) *n* [L. *ovum* egg] The megasporangium of seed plant; a small egg or egg-like structure

**ovulif ous** (ô'vûlîf'êrôs) *a*. [L. *ovum* egg *ferre* to carry] Ovule-producing containing ovules; *appl* scales, each bearing one or more ovules, developed on bract scales, as in Coniferae.

ovulophore,—a gynoecium bearing ovules.

ovum (ō vūm) *n.* [*L. ovum* egg] A female germ cell mature egg-cell. *Plur. ova.*

oxalates (ōk'salāts) *n. plur.* [*Gk. oxys* sharp.] Salts of oxalic acid occurring as metabolic by-products in various plant tissues and in urine also found in mantle of certain bivalves.

oxea (ōk'sēā) *n.* [*Gk. oxys* sharp.] A sponge spicule rod-shaped and sharp at both ends.

oxeote (ōk'sēōtē) *a.* [*Gk. oxys* sharp.] Like an oxa in form of a simple rod *appl.* sponge spicules.

oxidase (ōk'sidās) *n.* [*Gk. oxys* sharp.] An enzyme which promotes oxidation an oxidizing enzyme.

oxidise (ōk'sidīz) *v.* [*Gk. oxys*, sharp.] To combine with oxygen to increase oxygen content.

oxyster (ōk'sistēr) *n.* [*Gk. oxys* sharp *aster* star] Stellate sponge spicul with sharp-pointed rays.

oxybiote (ōk'sibīōtē) *a.* [*Gk. oxys* sharp *bios* means of life.] Living in presence of oxygen aerobic.

oxychlorocruorin (ōk'siklō'rūkrōōrīn) *n.* [*Gk. oxys* sharp *chloros* green *L. cruor* blood.] Chlorocruorin combined with oxygen, as in aerated blood of worms.

oxychromatin (ōk'sikrō'matīn) [*Gk. oxys* sharp *chroma*, colour] Linin.

oxydactyl (ōk'sidākt'il) *a.* [*Gk. oxys* sharp *dactylus* finger] Having slender tapering digits.

oxydiact (ōk'sidīakt) *a.* [*Gk. oxys* sharp *di* two; *aktis* ray] Having three rays with two fully developed *appl.* sponge spicules.

oxygnathous (ōk'sig'nāthūs) *a.* [*Gk. oxys* sharp *gnathos* jaw] Having more or less sharp jaws.

oxyhaemocyanin (ōk'sihē'mōs'ānīn) *n.* [*Gk. oxys* sharp *haema*, blood *kyanos* blue.] Haemocyanin combined with oxygen as in aerated blood of Mollusca and Crustacea.

oxyhaemoglobin (ōk'sihē'mōglō'bīn) *n.* [*Gk. oxys* sharp *haema*, blood *L. globus* globe.] Haemoglobin

combined with oxygen as found in arterial blood HbO

oxyhexactin (ōk'sihēksākt'īn) *n.* [*Gk. oxys* sharp *hex* six *aktis* ray] A hexactine with rays ending in sharp points.

oxyhexaster (ōk'sihēksāstēr) *n.* [*Gk. oxys* sharp *hex* six *aster* star.] A hexaster with rays ending in sharp points.

oxyluciferin (ōk'silōosif'ērīn) *n.* [*Gk. oxys* sharp *L. luc* light; *ferre* to carry] The substance formed by action of luciferase on luciferin, emitting light in photogenic organs.

oxyntal (ōk'sint'ik) *a.* [*Gk. oxys* to make acid.] Secreting acid *appl.* parietal cells and fundic glands of stomach.

oxyphil (ōk'sifil) *a.* [*Gk. oxys* sharp *phileo*, to love.] Having strong affinity for acids stains oxyphilic.

oxyphilous (ōks'ifilūs) *a.* [*Gk. oxys* sharp *phileo* to love.] Tolerating only acid soils or substrates.

oxyphobe (ōk'sifōb) *a.* [*Gk. oxys* sharp *phobos*, flight.] Unable to tolerate soil acidity.

oxyphyte (ōk'sifit) *n.* [*Gk. oxys* sharp *phytos*, plant.] A plant thriving on acid soil a calcifuge.

oxytocl (ōk'sitōs'ik) *a.* [*Gk. oxys* sharp *tokos* birth.] Accelerating parturition *appl.* pituitary hormone inducing contraction of uterus.

oxytocin (ōk'sitōs'īn) *n.* [*Gk. oxys* sharp *tokos* birth.] Hormone secreted by posterior lobe of pituitary gland which stimulates uterine muscle a-hypophamine pitocin.

oxytropism (ōks'trōpiz'm) *n.* [*Gk. oxys* sharp *trope* turn.] Tendency of organisms to be attracted by oxygen.

oxytylot (ōk'sitilōt) [*Gk. oxys* sharp *tylos* knob.] A slender straight sponge spicule, sharp at one end knobbed at the other.

## P

P—denoting first parental generation, P<sub>2</sub> the grandparents, etc., in law of Mendel of F

**Pacchionian bodies** [*A Pacchioni* Italian anatomist]. Arachnoidal granulations, eminences of sub-arachnoid tissue covered by arachnoid membrane and pressing into dura mater

**pace maker**—a part or region determining rate of activity in other parts of the body the sino-auricular node, which initiates the normal heart-beat.

**pachydermatous** (pák'idér'mátús) *a.* [Gk. *pachy* thick *derma* skin.] With thick skin or covering

**pachymeninx** (pák'tóm'ingks) *n.* [Gk. *pachys* thick *meninx* membrane.] The dura mater

**pachynema** (pák'tnómá) *n.* [Gk. *pachys* thick *nema* thread.] Chromosome thread : the pachytene stage.

**pachynesi** (pákln'sis) *n.* [Gk. *pachynesis* thickening.] Thickening as of mitochondria.

**pachynosis** (pákln'sis) *n.* [Gk. *pachynosis* thickening.] Growth in thickness as of plants.

**pachyton** (pák'tón) *a.* [Gk. *pachy* thick *tonia*, band.] *Appl* prophase stage in meiosis during which homologous chromosomes are associated as bivalents.

**Pacinian bodies** corpuscles [*P. Pacini* Italian anatomist]. Distal nerve-endings consisting of lamellated connective-tissue capsule with core of nucleated protoplasmic cells containing ramifications of medullated nerve-fibre corpusculum lamellatum.

**paedogamy** (pédóg'ámí) *n.* [Gk. *país* child *gamos* marriage.] Type of utogamy in protozoa where gametes are formed after multiple division of nucleus.

**paedog** = *sis* (pá'dójén'sis) *n.* [Gk. *país* child *genesis* descent.] Reproduction in young or larval stages, as axolotl certain *D. ptera*.

**paed mesoblast** (pá'dómés'óblást) *n.* [Gk. *país* child *mesos* middle *blastos* bud.] Portions of primitive mesoblast destined to form transitory larval structures

**paed morphic** (pá'dómór'fik) *a.* [Gk. *país* child *morphe* form.] *Appl* or *part* primitive or embryonic structures appearing in recent or in adult animals.

**paired bodies**,—small bodies lying close to sympathetic chain in *Elasmobranchii* representing the adrenal medulla.

**paired fins**,—pectoral and pelvic fin of fishes.

**pairing**,—process of attraction between homologous chromosomes during syngotone.

**palaeartic** (pál'tárk'ík) *a.* [Gk. *palaios* ancient *Aktis* Great Bear] *Appl* or *part* a zoogeographical region or sub-region of the borealctic region including Europe North Africa, Western Asia Siberia, northern China, and Japan.

**palaeobiology** (pál'téóiól'ógí) *n.* [Gk. *palaios* ancient *bios* life *logos*, discourse.] Biology of extinct plants and animals.

**palaeobotany** (pál'téóiót'ání) *n.* [Gk. *palaios* ancient *bótos* pasture.] Botany of fossil plants and plant impressions palaeophytology

**Palaeocene** (pál'téóén) *n.* [Gk. *palaios* ancient *keinos* recent.] *Appl* and *part* earliest epoch of the Cenozoic era.

**palaeocerebellum** (pál'téóér'ébéllóm) *n.* [Gk. *palaios* ancient *L. dom.* of cerebrate brain.] Phylogenetically older region of cerebellum, receiving spinal and vestibular afferent fibres. *Opp* neocerebellum.

**palaeocranium** (pál'téókrá'níóm) *n.* [Gk. *palaios* ancient *kranion*, skull.] Type of skull or stage in development extending no further back than vagus nerve

**palaeocephalon** (pál'téóénkéf'álon, -álf) [Gk. *palaios* ancient *kephalos* brain.] The segmental or primitive vertebrate brain.

**Palaeogene** (pál'téójén) *n.* [Gk. *palaios* ancient *genes* an age.] *Part* or *appl* the early Tertiary period Eocene and Oligocene

**paleogenetic** (pāl'ējēnēt'ik) *a.* [Gk. *paleios* ancient; *genesis* descent.] *Appl.* atavistic features fully developed, which are usually characteristically embryonic.

**pala ogenetica** (pāl'ējēnēt'ika) *n.* [Gk. *paleios* ancient *genesis* descent.] Genetics as applied to paleontology genetic interpretation of fossil structures or species.

**Palaeolaurentian** (pāl'ēolārēn'ashlūn) *a.* [Gk. *paleios* ancient *River St. Lawrence.*] *Part* or *appl.* Archaeozoic era.

**Palaeolithic** (pāl'ēolith'ik) *a.* [Gk. *paleios* ancient *lithos* stone.] *Appl.* or *part.* the older or chipped stone age.

**paleontology** (pāl'ēontōl'ogē) *n.* [Gk. *paleios* ancient *on* being *logos* discourse.] The science of past organic life, based on fossils and fossil impressions.

**paleophytology**—**paleobotany**  
**Paleozoic** (pāl'ēzō'ik) *a.* [Gk. *paleios* ancient *zōon* animal.] *Appl.* era comprising the Protozoic and Deuterozoic faunal epochs, preceding the Mesozoic era Cambrian to Permian periods the age of fishes and amphibians Primary era.

**paleozoology** (pāl'ēzōzōl'ōjē) *n.* [Gk. *paleios* ancient *zōon* animal *logos* discourse.] Zoology of fossil animals and animal impressions.

**palama** (pāl'amā) *n.* [Gk. *palamos* the palm.] Foot-webbing of aquatic birds.

**palatal** (pāl'tāl) *a.* [L. *palatum* palate.] *Part.* palate palatine *appl.* bone sinns, etc.

**palate** (pāl'tē) *n.* [L. *palatum* palate.] Roof of mouth insect epipharynx projection of lower lip of perianth corolla.

**palatine** (pāl'tān) *a.* [L. *palatum* palate.] *Part* or in region of palate *appl.* artery bone, foramen.

**palatoglossal** (pāl'ātōglōs'al) [L. *palatum* palate; Gk. *glossa*, tongue.] *Part* palate and tongue *appl.* muscle glossopalatine.

**palatonasal** (pāl'ātōnāl'āl) *a.* [L. *palatum* palate *nasus* nose.] *Part.* palate and nose.

**palatopharyngeal** (pāl'ātōfār'njēāl) *a.* [L. *palatum*, palate; Gk. *pharynx* pharynx.] In region of palate and pharynx pharyngopalatine; *appl.* muscle.

**palatopterygoid** (pāl'ātōptēr'gōid) *a.* [L. *palatum*, palate Gk. *pterygion* little wing *eidos* form.] *Part* palate and pterygoid.

**pal toquadrat** (pāl'ātōkwōd'rāl) *a.* [L. *palatum* palate *quadratus* squared.] Connecting palatine and quadrate *appl.* dorsal cartilage of mandibular arch.

**palea** (pāl'ēā) *n.* [L. *palea*, chaff] A small bract on floret of Compositae an inner chaffy bracteole valve or upper palea, of grasses lower palea or lemma rimmentum or scaly growth of epidermis in ferns.

**paleaeous** (pāl'ēāshūs) *a.* [L. *palea*, chaff.] Chaffy *appl.* capitulum furnished with small scaly bracts or paleae.

**paleo-**—**paleo-**  
**pal t.**—palea, of grasses.

**palette** (pāl'ēt) *n.* [F. *palette* from L. *pala*, spade.] The modified cupule-bearing tarsus of anterior leg in male beetles.

**paliform** (pāl'ifōrm) *a.* [L. *pactus* stake *forma*, shape.] Like an upright stake.

**palinal** (pāl'ināl) *a.* [Gk. *palin*, reversely] From behind forwards; *appl.* jaw movement, as in elephants *appl.* proral.

**palingeic** (pāl'injēn'ēis) *a.* [Gk. *paleis* anew *genesis* descent.] Abrupt metamorphosis rebirth of ancestral characters recapitulation.

**palingenetic** (pāl'injēnēt'ik) *a.* [Gk. *paleis*, anew *genesis* descent.] Of remote ancient origin *part.* palingenesis

**pallid** tissue, — photosynthetic ground tissue of many foliage leaves so called from pallid-like arrangement of elongated cells.

**pallaeothesia** (pāl'āthē'siā) *n* [Gk. *pallain* to quiver *arthrosis* sensation.] Vibratory sensation bone sensibility

**pallet** (pāl'ēt) *n* [L. *pala* pede.] A shelly plate on a bivalve siphon.

**pallial** (pāl'iāl) *a* [L. *pallium* mantle.] *Part* molluscan pallium or mantle *appl* line groove sinus muscles ganglion.

**palliate** (pāl'iāt) *a* [L. *pallium* mantle.] Having a mantle or similar structure.

**pallidum** (pāl'idūm) *n* [L. *pallidus* pale.] The medial parts of globus pallidus of lentiform nucleus

**pallipedal** (pāl'pē'dāl) *a* [L. *pallium* mani *pes* foot.] *Part* molluscan mantle and foot

**pallium** (pāl'iūm) *n* [L. *pallium* mantle.] A mollusc or brachiopod mantle portion of cerebral wall.

**palmar** (pāl'mār) *a* [L. *palma* palm (hand.)] *Part* palm of hand *appl* ponceurosis, nerve muscle reflex

**palmaria** (pāl'mār'iā) *n* *plu* [L. *palmaris* *part* palm.] The third brachials of Crinoiden.

**palmate** (pāl'māt) *a* [L. *palma* palm.] *Appl* leaves divided into lobes arising from common centre *appl* hand like tuber as in certain orchids *appl* folds of cervix uteri having anterior toes webbed as in most aquatic birds

**palmatifid** (pāl'māt'ifid) *a* [L. *palma* palm *funder* to cleave.] *Appl* leaves divided into lobes to about the middle (acute angles) each other

**palmatilobate** (pāl'māt'lob'āt) *a* [L. *palma* palm *lobus* lobe.] Palmate with rounded lobes and divisions half way to base.

**palmatipartite** (pāl'māt'ipār'tit) *a* [L. *palma* palm *partitus* divided.] Palmate with divisions more than half way to base.

**palmatisect** (pāl'māt'isēkt) *a* [L. *palma* palm *sectus* cut.] Palmate with divisions nearly to base

**palmeella** (pāl'mē'lā) *n* [Gk. *palmeus* quivering.] A sedentary stage of

certain algae the cells dividing within a jelly-like mass and producing motile gametes.

**palmigrada**,—**plantigrade**

**palmiped** (pāl'mipēd) *a* [L. *palma*, palm *pes* foot.] Web-footed. *n* A web-footed bird.

**palmitin** (pāl'mitin) *n* [Gk. *palma*, palm-tree.] A fat occurring in adipose tissue milk, and palm-oil ( $C_{17}H_{35}COO$ ),  $C_{18}H_{37}$ .

**palmaria** (pāl'mār'iā) *n* [L. *palma* palm.] Terminal lobe or process between paired claws of insect feet.

**palp**,—**palpus** *g* *g*

**palpacle** (pāl'pāk'l) *n* [L. *palpar* to touch softly.] The tentacle of a dactylozoid or palp of Siphonophora.

**palpal** (pāl'pāl) *a* [L. *palpare* stroke.] *Part* a palp.

**palpate** (pāl'pāt) *a* [L. *palpar* to stroke.] Provided with palpus or palpi. *n* To examine by touch.

**palpeb** *a* (pāl'pēbrā) *n* [L. *palpebra*, eyelid.] An eyelid. *Plu* palpebrae.

**palpebral** (pāl'pēbrāl) *a* [L. *palpebra* eyelid.] *Part* eyelids *appl* antennae ligaments, nerves, etc. *appl* lobe on which the eye of trilobites rests.

**palpife** (pāl'pifē) **palpiger** (pāl'pigr) *n* [L. *palpare* to stroke *ferre* to carry.] A maxillary lobe or lobe of prementum bearing palpus of insects.

**palpif** *m* (pāl'pifōm) *a* [L. *palpar* stroke *forma* shape.] Resembling palpus or insect feeler

**palpimacula** (pāl'pitmak'ulā) *n* [L. *palpar* to stroke *macula* spot.] Sensory area on labial palps of certain insects.

**palporcell** (pāl'pōsell) *n* [L. *palpare* to touch *cella* eye-lash.] A soft sensory filament attached to sense cells of Hydromedusae

**palpon** (pāl'pōn) *n* [L. *palpar* to stroke.] A hydrocyt or dactylozoid of Siphonophora.

**palpusus** (pāl'pōlūs) *n* [L. *palpar* to stroke.] A small palpus or feeler

**palpus** (pāl'pūs) *n* **palpi** (pāl'pī)

- pal* [L. *palpare* to stroke.] Labial feelers of Insecta sensory appendages on prostomium of Polychaeta, on mandibles of Crustacea pedipalpos, *q* =
- paludicol (pāl'ūdīkōl) *n*. [L. *palus* marsh *coler* to inhabit.] Living in marshes palodal palustral.
- palule (pāl'ūl) *n*. [L. *palus* stake] An unattached calcareous process of corals small palus.
- pales (pāl'th) *n*. pall (pāl't) *plac*. [L. *palus* stake.] A series of small pillars projecting upwards from the theca base towards stomodaeum of madrepora corals.
- palustral,—paludicole.
- palynology (pāl'īnōl'ōjī) *n*. [Gk. *palynē* to scatter (*palis* pollen) *logos* discourse.] The study of pollen and of its distribution pollen analysis.
- pampiniform (pāmpīn'fōrm) *n*. [L. *pampinus* tendril *forma*, shape] Tendril-like *appl*. convoluted vein plexus of spermatic cord *appl*. body the parovarium.
- pamprodactylous (pām prōdāk'tīlūs) *n*. [Gk. *pau*, all *pro* in front *dactylus* digit.] With all toes pointing forward.
- pancreas (pān'krēās) [Gk. *pau* all *kras* flesh] A compound racemose gland with exocrine and endocrine functions, *f* most vertebrates.
- pancreati (pān'krēātī'k) *n*. [Gk. *pau* all *kras* flesh.] *Part*. pancreas *appl*. artery duct, vein, enzymes hormones, juice.
- pancreaticoduod *nal*, — *part*. pancreas and duodenum *appl*. arteries, veins.
- pancreatrophic (pān'krēāt'rōf'īk) *n*. [Gk. *pau*, all *kras* flesh *trophē* nourishment.] *Appl*. preputillary hormone or principle causing increase in secretion of insulin.
- pancreozymin (pān'krēōz'mīn) *n*. [Gk. *pau* all *kras* flesh *zymin* *laev*] Duodenal secretion or hormone which stimulates production of pancreatic enzymes.
- panduriform (pāndū rīfōrm) *n*. [Gk.

- pandura* lute L. *forma* shape.] Fiddle-shaped *appl*. leaves.
- Paneth cells [J. Paneth Austrian physiologist]. Oxyphil cells at base of crypts of Lieberkühn.
- pangamic (pāngām'īk) *n*. [Gk. *pau* all *gamos* marriage.] *Appl*. indiscriminate mating.
- pangon (pān'jōn) *n*. [Gk. *pau* all *gonis* offspring] A hypothetical unit *q* =
- pangenesis (pāngēn'ēsis) *n*. [Gk. *pau* all *genesis* descent.] The germinal theory that hereditary characteristics are carried by germs from individual body cells.
- panicle (pān'īkl) *n*. [L. *panicula*, tuft.] A tuft or bunch of flowers or seeds, close or scattered compound raceme.
- paniculate (pān'īklāt) *n*. [L. *panicula* tuft.] Having flowers arranged in panicles.
- panmeristic (pān mērīst'īk) *n*. [Gk. *pau*, all *meros* part.] *Appl*. an ultimate protoplasmic structure of independent units.
- panmixis (pānmīk'sī) *n*. [Gk. *pau* all *mixis* mixing] Indiscriminate interbreeding consequent on suspension of influence of natural selection.
- panniculus (pān'īkl'ūs) *n*. [L. *derm.* of *pauvus* cloth.] A layer of tissue, as superficial fascia.
- panoisti (pānōstī'k) *n*. [Gk. *pau* all *ova* egg] *Appl*. ovariol in which nutritive cells are absent, egg-yolk being formed by epithelium of follicle. *Opp*. merolistic.
- panphot in tric (pān fōtēn'ī'k) *n*. [Gk. *pau*, all *phos* light *metron* measure.] *Appl*. leaves oriented to avoid maximum direct sunlight of euphotometric.
- pansporoblast (pānspō'rōblāst) *n*. [Gk. *pau*, all *sporas* seed *blastis* bud.] A cell-complex of Neosporidia, producing sporoblasts and spores an archespor.
- panthalasal (pān'thālās'īk) *n*. [Gk. *pau* all *thalassa*, sea.] Living both in coastal and offshore waters neritic and oceanic.



pantothenic (pántōthēn'ik) *n* [Gk *pantotēn* from everywhere.] *Appl* acid occurring in tissues and foods the rat anti-grey hair and chick antidermatitis factor of vitamin B complex vitamin B<sub>5</sub>.

pan-tropical.—distributed throughout the tropics *appl* species.

papilionaceous (pāp'ilīōnā'shūs) *n* [L. *papilio* butterfly] Resembling a butterfly *appl* a corolla of five petals, one enlarged posterior standard or vexillum two united anterior forming keel or carina, and two lateral the wings or alae.

papilla (pāp'il'ā) *n* [L. *papilla*, nipple.] A glandular hair with one secreting cell above the epidermis level an accessory adhesive organ with retractile tip of some trematodes a conical dermal structure on birds, the beginning of a feather one of various small projections of orum of tongue and eminences on skin "conical structure as nipple" pex of anal pyramid lacrimal papilla, etc.

papillary (pāp'ilār'i) *n* [L. *papilla* nipple.] *Part* or with papillae *appl* a dermal layer *appl* process of caudate lobe of liver

papillate (pāp'ilāt'i) *n*. [L. *papilla* nipple] Covered by papillae papillose lik a papilla *appl* petals with external cells projecting slightly above surface.

papilliform (pāp'il'fōrm) *n* [L. *papilla* nipple *forma* shape] Like papilla in shape

pappifer us (pāp'fēr'ūs) *n* [L. *pappus* down *ferre* to carry] Pappus-bearing

pappos (pāp'ōs) *n* [L. *pappus* down.] II ring limb of calyx developed as a t of hairs bristles downy or covered with feathery processes papposa.

pappus (pāp'ūs) *n* [L. *pappus* down] A circle or tuft of bristles hairs or feathery processes place of limb of calyx.

papulae (pāp'ulē) *n* *plu* [L. *papula* pimple] Dermal gills hollow

contractile skin : processes of Asteroidea, with respiratory function pimples pustules.

papyrace us (pāp'irā'shūs) *n*. [L. *papyrus* papyrus-rush.] Of papery texture papyrilous.

parabasal (pār'ābā'sāl) *n* [Gk. *para* beside *basis* base] *Appl* striated apparatus surrounding the calyx of certain protozoa *appl* granule or kinetonucleus a cell-body of flagellates.

parabasalia (pār'ābā'sāl'ia) *n* *plu* [Gk. *para* beside *basis* base.] The basalia of crinoids when circlet of periradial infrabasalia occurs beneath them.

parabiosis (pār'ābīō'sis) *n* [Gk. *para* beside *bios* manner of life.] The condition of being conjoined, either from birth, as Siamese twins or experimentally as laboratory animals phylacobiosis *q.v.*

parabioti (pār'ābīō'tik) *n* [Gk. *para* beside *bios* life.] Conjoined to greater or less extent tutelary or phylacobiotic, in ants living amicably in compound nest, as ants of different species or genera.

parblast (pār'āblāst) *n* [Gk. *para* beside *blastos* bud] The yolk of meroblastic eggs large nuclei of cells laden with yolk-granules in development of higher mammals

parabranchi (pār'ābrāng'kiā) *n*. [Gk. *para* beside *branchia* gills.] A much plumed mollusc osphradium or chemoreceptor

parabronchii (pār'ābrōng'ki) *n* *plu* [Gk. *para* beside *branchia* wind-pipe.] The tertiary lung tubes of bird their terminations being embedded in lung mesenchyme.

paracardial (pār'ākār'diāl) *n* [Gk. *para* beside *kardia* stomach.] Near or surrounding ardia or neck of stomach *appl* lymph-glands.

paracentral (pār'āsen'trāl) *n*. [Gk. *para* beside *L. centrum* centre.] Situated at or near the centre *appl* lobul gyrus fissure



**parafrontals** (pär'frün'tälz) *n* *plu*  
[Gk. *para* beside; L. *frons* forehead] The continuation of genae between eyes and frontal suture in insects genavertical plates.

**paraganglia** (pär'gä'ng'g'ilä) *n* *plu*  
[Gk. *para* beside *gangelion* swelling] Scattered cell clusters along aorta and in other parts of body considered to secrete adrenalinic chromophil or phaeochrome cells.

**paragaster** (pär'gäs'tër) *n*. [Gk. *para* beside *gaster* stomach.] A central cavity of sponges into which gastric ostia open.

**paragastric** (pär'gäs'trik) *n* [Gk. *para* beside *gaster* stomach.] *Part* a paragaster *appt* passages or cavities in branches of sponge *appt* paired blind canals from infundibul to oral cone of ctenophores

**paragastrula** (pär'gäs'troolä) *n*  
[Gk. *para* beside *gaster* stomach.] Stage of amphiblastula of sponge when flagellated cells are invaginated into dome of rounded cells

**paragenesis** (pär'jën 'säis) *n* [Gk. *para* beside *genesis* descent.] Hybrids fertility with parent species but not *inter se* subsidiary mode of reproduction

**paraglobulin** (pär'glöb 'ülün) *n* [Gk. *para* beside L. *globus* globe.] Globulin of blood serum.

**paraglossa** (pär'glös 'ä) *n* [Gk. *para* beside *glossa* tongue.] A process on each side of ligula of insects hypopharynx paired cartilage of chondrocranium

**paraglycogen** (pär'gl'y 'koyën) *n* [Gk. *para* beside *glykoly* sweet *genesis* birth] Reserve food material stored in protoplasm-grains of Gregarina.

**paragnatha** (pär'gnä'thä) *n* *plu*  
[Gk. *para* beside *gnathos* jaw] Paired delicate unjointed processes (maxilla of certain arthropoda.

**paragnathous** (pär'gnä'thüs) *n*  
[Gk. *para* beside *gnathos* jaw] With mandibles of equal length *appt* birds.

**para Golgi apparatus**—small constituents of cell in spaces between parts of Golgi apparatus.

**paragula** (pär'göl'lä) *n* [Gk. *para*, beside L. *gula*, gullet.] A region beside gula on insect head.

**paragynous** (pär'j'ynüs) *n* [Gk. *para* beside *gyns* female.] *Appt* antheridia lateral to oogonium, as in some Peronosporales.

**paraheliode** (pär'äh'e'löd) *n*. [Gk. *para* beside *helios* sun.] A special arrangement of spines in certain Cactaceae parasol.

**paraheliotropism** (pär'äh'e'löt'röp'tum) *n*. [Gk. *para* beside *helios* sun *tropis* turn.] Tendency of plants to turn edges of leaves towards intense illumination, thus protecting surfaces.

**parahormone** (pär'ähör'mön) *n*. [Gk. *para* beside *hormones* to arouse.] A substance which acts like a hormone but is a product of ordinary metabolism of cells.

**parahypophysis** (pär'äh'pöf'izis) *n* [Gk. *para* beside *hypo* under *physis* to grow] Vestigial structure below pituitary gland.

**paralectotype** (pär'äl'ek'tölp) *n*. [Gk. *para* beside *lectos* chosen *type* pattern] A specimen, of series used to designate species which is later designated as paratype

**paralimnic** (pär'ilim'nik) *n* [Gk. *para* beside *limnos* lake.] *Part* or inhabiting shore of lakes.

**paralinen** (pär'ilin 'ün) *n* [Gk. *para*, beside *linos* linen thread.] Not clear ground-substance.

**parallelinnervat** parallelodrome, —*appt* leaves with veins or nerves parallel.

**parafutein** (pär'alü'tein, koo'rei) *n*. [Gk. *para* beside L. *fusus* golden yellow] *Appt* epithelioid luteal cells of theca interna. *appt* epithelial follicular luteal cells.

**paramastigote** (pär'amä 'yigöt) *n*. [Gk. *para* beside *mastix* whip.] Having one long principal flagellum and short accessory one as certain Mastigophora.

- paramastoid** (pär'mäs'toid) *n.* [Gk. *para* beside; *mastos* breast *side* form.] Beside the mastoid *appl.* two paroccipital processes of ex occipitals *appl.* process projecting from the jugular process.
- paramere** (pär'mēr) *n.* [Gk. *para*, beside *meros* part.] Half of a bilaterally symmetrical structure one of paired lobes extending to penis in some insects.
- parametrium** (pär'mēt'rīum) [Gk. *para*, beside *metra* womb.] Fibrous tissue partly surrounding uterus.
- paramitosis** (pär'mit'ōs) *n.* [Gk. *para*, beside *mitos* thread.] Inter-filar substance of protoplasm.
- paramorph** (pär'mōrf) *n.* [Gk. *para*, beside *morphē* form.] Any variant form or variety.
- paramylon** (pär'm'ildō) *n.* [Gk. *para* beside *amylon* starch.] A substance allied to starch, occurring in certain algae and flagellates *paramylum*.
- paranasal** (pär'nā'sāl) *n.* [Gk. *para*, beside; L. *nasus*, nose.] *Appl.* air-entrances in maxilla, frontal, ethmoid sphenoid, and palatine bones.
- paranatal** (pär'nā'tāl) [Gk. *para*, beside *natos* thread.] Having spirals not interlocked as in sister chromatids *anorthospiral*. *Appl.* pleconemic orthospiral.
- paranephri** (pär'nēf'rī) [Gk. *para*, beside *nephros* kidney.] Beside the kidney *appl.* a fatty body behind renal fascia.
- paranephros** (pär'nēf'rōs) [Gk. *para*, beside *nephros* kidney.] An adrenal body.
- paranota** (pär'nō'tā) *n.* *plu* [Gk. *para* beside *noton* back.] Lateral expansions of arthropod notum or tergum, believed to have developed into wings during evolution of insects.
- parapetio** (pär'nē'tiō) *n.* [Gk. *para*, beside; L. *nucleus* kernel.] The substance of true nucleolus *pyrenon*.
- parapetio** (pär'nē'tiō) *n.* [Gk. *para* beside; L. *nucleus* kernel.]

A micronucleus spherical mass of mitochondria (merely nebenkern an aggregation of mitochondria in the spermatid destined to form axial filament envelope).

**parapet** (pär'pēt) *n.* [It. *parapeto* guard *petto* breast.] A circular fold of body wall below margin of disc in sea-anemones.

**paraphyll** (pär'áfīl) *n.* [Gk. *para* beside *phyllon* leaf.] One of the branching chlorophyll containing outgrowths arising between leaves or from their bases, in mosses.

**paraphysis** (pär'áfīs) *n.* [Gk. *para*, beside *physis* growth.] A slender filamentous epidermal outgrowth occurring among sporogenous organs protective or nutritive interascal hypha non-sexual hypha non-nervous outgrowth on top of brain of nearly all vertebrates.

**parapineal** (pär'āpīn'ēl) *n.* [Gk. *para*, beside L. *pinna*, pine-cone.] *Appl.* an eye-like epiphysis of lampreys, pineal body of other vertebrates.

**paraplast** (pär'āplāst) *n.* [Gk. *para*, beside *plastos*, mould.] Vegetative or less active part of cell substance originally ectoplasm of metaplast.

**parapodion** (pär'āpō'diōn) *n.* [Gk. *para*, beside *podion* foot.] A paired lateral locomotory structure on body-segments of polychaetes.

**parapolar** (pär'āpō'lār) *n.* [Gk. *para*, beside *polos* pivot.] Beside the pole *appl.* first two trunk cells in development of Rhombomeres.

**parapophysis** (pär'āpōf'īs) *n.* [Gk. *para* beside *physis* growth.] A transverse process arising from vertebral centrum.

**parapostnial** (pär'āpōst'niāl) *n.* [Gk. *para*, beside L. *post*, after *gena*, cheek.] *Appl.* thickened portion of occiput in insects.

**paraproct** (pär'āprōkt) *n.* [Gk. *para*, beside *proctos* anus.] A plate situated on each side of anus in Diplopoda and some insects *podical plate*.

paraprostat (pär'ap de stät) *n* [Gk. *para* beside *L. pro* before *stas* to stand.] Anterior bulbo-urethral glands superior Cowper's glands of Levdolph.

parapsid (pär'ap sîd) *n*. [Gk. *para* beside *apsis* arch.] *Appl* skull with single vacuity bounded by parietal postorbital and squamosal

parapsis (pär'ap sîs) *n* [Gk. *para* beside *apsis* arch.] Lateral portion of mesonotum, as in ants.

parapteron (pär'ap tērōn) *n* [Gk. *para* beside *pteron* wing.] Tegula shoulder lappet, or scapula of insect mesothorax penae humeralis of birds parapterum.

parapylos (pär'apîl) *n*. *plu* [Gk. *para* beside *pylos* gate.] Two accessory openings in certain developing Radiolana.

paraquadrata (pär'kwôd it) *n* [Gk. *para* beside *L. quadratus* squared.] The squamosal *n* hammer-shaped investing bone supporting the suspensorium externally

pararectal (pär'rêk tál) *n*. [Gk. *para* beside *L. rectus* straight.] Beside rectum *appl* fovea, lymph glands

parasemati (pär'sêmatîk) *n* [Gk. *para* beside *sema* sign.] *Appl* markings structures or behavior tending to mislead or deflect attack by an enemy

parasem (pär'sêm) *n* [Gk. *para* beside *sema* sign.] Misleading appearance or marking as an ocellus near tail of fishes.

parasepial (pär'sêpîal) *n* [Gk. *para* beside *L. septum* partition.] *Appl* cartilage more or less enclosing Jacobson organ.

parasit (pär'sît) *n* [Gk. *parasitos* from *para* beside *As* food.] An organism living with within another its own advantage in food or shelter

parasitic (pär'sîtîk) *n* [Gk. *parasitos* parasite.] *Appl* an organism living at expense of nothe and in or on it.

parasitic castration, — castration caused by presence of parasite in male crabs infested by Sacculina

parasitism (pär'sîtîzîm) *n* [Gk. *parasitos* parasite.] A form of symbiosis in which one symbiont, parasite, receives advantage to detriment of other or host.

parasitoid (pär'sîtôid) *n* [Gk. *parasitos* parasite *eidos* form.] An organism alternately parasite and free living

parasitology (pär'sîtôlôjî) *n*. [Gk. *parasitos* parasite *logos* discourse.] The science treating of plant and animal parasites.

parasphenoid (pär'spênôid) *n*. [Gk. *para* beside *sphen* wedge *eidos* form.] Membrane bone forming floor of cranium in certain vertebrates.

paraspor (pär'aspôr) *n* [Gk. *para* beside *spos* seed.] A spore formed from a cortical cell in certain algae

parastemon (pär'stêmōn) *n*. [Gk. *para* beside *stemon* thread.] A sterial stamen parastamen stammodium *q.v*

parasternalia (pär'stêrnâlîa) *n plu* [Gk. *para* beside *sternon* breast.] Abdominal ribs or gastralia.

parasternum (pär'stêrnôm) *n* [Gk. *para* beside *L. sternum* breast bone.] The sum-total of abdominal ribs in certain epiplea, also in Stegocephal and Archacopteryx.

parastichy (pär'stîktî) *n* [Gk. *para* beside *stichos* row.] A secondary spiral in phyllotaxis.

parastipes (pär'stîpês) *n* [Gk. *para* beside *L. stipes* stalk.] S basal or inner sclerite of insect stipes.

parasympatheti (pär'sîmptîbêtîk) *n* [Gk. *para* beside *sympathos* of like feelings.] Enteral *appl* the craniosacral portion of the autonomic nervous system.

parasynapsis, — parasynapsis, *q.v*  
pa asynd I (pär'sîn deîs) *n*. [Gk. *para* beside *syndesis* banding together.] Syndesis where homologous chromosomes conjugate I syntwice.

paratsy (pär'sî ell) *n* [Gk. *para* beside *telos* end.] Evolution from maternal unrelated to that of type, but resulting in superficial resemblance

paratestis (pär'äts'tis) [Gk. *para* beside; L. *testis* testicle.] Small reddish-yellow fatty body in male tritons.—products autacoids regulating appearance of nuptial apparel.

parathyreoid,—parathyroid.

parathyria (pär'äth'rīn) n. [Gk. *para* beside, *thyraos* shield.] Principle of internal secretion of parathyroids, which regulates calcium and phosphorus metabolism parathormone.

parathyroid (pär'äth'rōid) n. [Gk. *para* beside *thyraos* shield *oides* form.] One of four small brownish-red endocrine glands near the thyroid.

paratoid (pär'ätoid) n. [Gk. *para-* beside, to extend along.] Appl. double row of poison glands extending along back of certain amphibians, as of Salamandra.

paratomy (pär'ä'tōmī) n. [Gk. *para*, beside *temno* cutting.] Reproduction by fission with antecedent regeneration, in certain annulids. Opp. archiatomy.

paratonic (pär'ä'tōn'ik) n. [Gk. *para*, beside *tonos* strain.] Stimulating appl. movements induced by external stimuli, as tropisms and nastic movements.

paratrophil (pär'ätrōf'ik) n. [Gk. *para* beside *trophos* to nourish.] Appl. method of nutrition of obligatory parasites.

paratype (pär'ä'tīp) n. [Gk. *para*, beside *typos* pattern.] Specimen described at same time as the one regarded as type of new genus or species aggregate of external factors affecting manifestation of genetic character abnormal type of species, as of bacterial colony.

paracethral (pär'ätrē'thräl) n. [Gk. *para* beside, *ecethestro* from *ecethestro*, rise.] Appl. racemose glands of the rethra, Littre's glands.

paravesical (pär'ävē'sikäl) [Gk. *para* beside; L. *vesica*, bladder.] Beside the bladder appl. fossa or depression of peritoneum.

paraxial (pär'äk'siäl) n. [Gk. *para* beside L. *axis* axis.] Alongside the axis appl. a medial column of mesoderm.

parac phalon (pär'äkräf'älön -älf) n. [Gk. *para* beside *enkephalos* brain] One of paired cerebral hemispheres.

parenchyma (pä'reng'kimä) n. [Gk. *para*, beside *enchyma* infusion.] Plant-tissue generally soft and of thin-walled relatively undifferentiated cells, which may vary in structure and function, as pith of mesophyll etc ground-work tissue of organs.

parenchymalia (pä'reng'kimä'liä) n. *plu* [Gk. *para*, beside *enchyma* infusion.] Spicules of parenchyma of Hexactinellida.

parenchymatous (pä'reng'kim ätis) n. [Gk. *para*, beside *enchyma*, infusion.] Part or found in parenchyma appl. kind of cell.

parenchymul (pä'reng'kim üliä) n. [Gk. *para*, beside *enchyma*, infusion.] A flagellate sponge larva with cavity filled with gelatinous connective tissue.

paretal generati n.—see P  
parenteral (pä'rent'ärl) [Gk. *para*, beside *enteron* gut.] Appl. injections administered otherwise than by way of alimentary canal.

parh mology (pär'homöl oji) n. [Gk. *para*, beside *homer* share *logos* discourse.] Apparent similarity of structure.

parichnos (pär'ik'nös) n. [Gk. *para* beside *ichnos* trace.] Two lateral scars at sides of vascular bundle trace in certain extinct ferns.

pari (pär'tes) n. [L. *paries* wall.] The central division of a compartment of Campanella wall of hollow structure, as of tympanum or of honey-comb.

parietal (pä'r'etäl) n. [L. *paries* wall.] Part or of lining part of wall of structure appl. cells, membranes, layer lobe, placitation, area between frons and occiput in insects, etc.

parietal bone—a paired bone of roof of skull.

parietal organ,—epiphyseal photo-receptor in lower vertebrates parapineal organ.

parietal region,—parietal region of brain.

parietal vesicle,—dilated distal part of pineal stalk.

parietes (pär'itēs) = *plu* [L. *paries* walls.] *Plu* of paries walls = sides of structures.

parietofrontal (pär'itōfrōn'tāl) = [L. *paries* wall *frons* forehead.] *Appl* a skull bone in place of parietals and frontals, as in Dipnoi.

parietomastoid (pär'itēmās'tōid) = [L. *paries* wall Gk. *mastos* breast *oides* form] Connecting mastoid with parietal *appl* a suture.

parieto-occipital (pär'itō-ōk'sip'tāl) = [L. *paries* wall *occiput* back of head.] *Appl* suture between parietal and occipital lobes of cerebrum.

parietotemporal (pär'itōtēm'pōrāl) = [L. *paries* wall *tempore* the temples] *Part* parietal and temporal regions *appl* a branch of the middle cerebral artery

parietovaginal (pär'itōvā'jīnāl) = [L. *paries* wall *vagina* sheath.] *Appl* paired muscle for retracting introvert and tentacles in Bryozoa.

pariplanate (pär'iplā'nāt) = [L. *par* equal *planum* wing] Pinnate without terminal leaflet.

parivincular (pär'ivīnk'ulār) = [L. *par* equal *vinculum* bond] *Appl* bivalve hinge ligament attached to nymphae of ophiurotic.

paroccipital (pär'ōk'sip'tāl) = [Gk. *para* beside L. *occiput* back of head.] *Appl* ventrally directed processes of exoccipitals.

parocciput (pär'ōk'sip'ūt) = [Gk. *para* beside L. *occiput* back of head] In insects a thickening of the occiput for articulation of neck sclerites.

parousiou (pär'ōs'ōs) = [Gk. *para* beside *oikos* house] With antheridium and archegonium close to one another parousous

parolfactory (pär'ōlfāk'tōrī) = [Gk. *para* beside L. *olfactorius* of factory] *Appl* an area and sulcus adjoining olfactory trigone of rhinencephalon.

paronychia (pär'ōn'fī'ā) = *plu* [Gk. *para* beside *onyx* nail.] Bristles on pulvillus of insect foot; whit low

parooophoron (pär'ōō'ōfrōn) = [Gk. *para* beside *oon* egg *phoron* to bear] A few scattered rudimentary tubules, remnants of Wolffian body in female in broad ligament between uterus and oophoron.

parosteal (pär'ōs'tēāl) = [Gk. *para* beside *stee* bone.] *Appl* abnormal bone formations.

parosteosis (pär'ōstēō'sis) = [Gk. *para* beside *stee* bone.] Bone formation in tracts normally fibrous.

parotī (pär'ōt'ik) = [Gk. *para* beside *ous* ear] A process formed by fusion of exoccipital and opisthotic in adult lizards.

par tid glands,—paired salivary glands opening into mouth cavity of mammals in some amphibiae, large swellings on side of head formed of aggregated cutaneous glands, sometimes poisonous

parovarium (pär'ōvā'rīum) = [Gk. *para* beside L. *ovarium* ovary] A small collection of tubules anterior to ovary the remnant in adult of embryonic mesonephros pampuliform body oophoron *q.v.*

pars (pär) = [L. *par* part.] A part of an organ as pars glandularis, nervosa, intermedia, tuberalis, of pituitary gland.

parthapogamy (pär'thēnāpōg'āmī) = [Gk. *parthenos* virgin *apo* away *gamos* marriage] Diploid or somatic parthenogenesis oötopogamy

parthēnita (pär'thēn'itā) = [Gk. *parthenos* virgin] Unsexual stage of trematodes in intermediate host.

parthnocarpy (pär'thēnōkār'pī) = [Gk. *parthenos* virgin *karpos* fruit.] Condition of producing fruit without seeds of having parthenocarpic fruits

- parthenogamy (pär'thënog'amī) *n* [Gk. *parthenos* virgin *gamos* marriage.] Parthenomixis, *q.v.*
- parthenogenesis (pär'thënjëns'ëis) *n*. [Gk. *parthenos* virgin *genesis* descent.] Reproduction without fertilisation by male element.
- parthenogentic (pär'thënjënt'ëk) *a*. [Gk. *parthenos* virgin *genesis* descent.] *Appl.* plants or animals developed from seed or ovum without fertilisation by pollen or spermatozoon *appl.* reagents which can activate ovum.
- parthenogenesis (pär'thënjëns'ëis) *n*. *Adv.* [Gk. *parthenos* virgin *genesis* offspring *idion* alone.] Zooids of protozoan colony with function of asexual reproduction.
- parthenomixis (pär'thënmiks'ëis) *n*. [Gk. *parthenos* virgin *mixis* mingling] The mingling of two nuclei produced with one gamete or gametangium parthenogamy.
- parthenosperm (pär'thënsëp'ërm) *n*. [Gk. *parthenos* virgin *sperma* seed.] A sperm produced without fertilisation, but resembling zygote.
- parthospore (pär'thënsöp'ë) *n*. [Gk. *parthenos* virgin *sperma* seed.] Azygospore, *q.v.*
- parthenot (pär'thëns'ët) *n* [Gk. *parthenos* virgin] A parthenogenetically produced haploid organism.
- particulate inheritance, — inheritance in one organism of distinctive paternal and maternal characteristics.
- partite (pär'tit) *a*. [L. *partitus* divided.] Divided nearly to base.
- parturition (pär'türish'ën) *n*. [L. *parturio* to bring forth.] The act or process of birth.
- paraumbilical (pär'ëmbil'ëikäl) *a*. [Gk. *para* beside L. *umbilicus* navel.] Beside the navel *appl.* small veins from anterior abdominal wall to portal and iliac veins.
- passage-cells, — thin walled endodermal or exodermal cells of root, which permit passage of solutions.
- patagial (pät'äjä) *a*. [L. *patagium* border] Of *part.* patagium.

- patagial (pät'äjä) *a*. [L. *patagium* border] Furnished with a patagi in patagium (pät'äjä'm) *n*. [L. *patagium* border] Membranous expansion between fore and hind limbs of bats, and flying squirrels and foxes similar expansion in lizards and on bird wing tegula, or dorsal process of prothorax in certain Lepidoptera anterior pronotum in Diptera.
- patell (pät'äl) *n* [L. *patella* small pan.] The knee-cap or elbow-cap segment between femur and tibia in Pycnogonida fourth segment or carpodite of pider's leg limpet rounded apothecium of lichens.
- patellar (pät'älär) *a*. [L. *patella* small pan.] *Part.* patella.
- patelliform (pät'äl'ërm) *a*. [L. *patella*, small pan *forme* shape.] Shaped like patella pan-shaped like bordered disc patellaroid.
- patent (pät'ënt) *a*. [L. *patens* lying open.] Open spreading widely *appl.* fastigate expanded.
- pathetic (pät'hët'ëk) *a*. [Gk. *pathos* feeling] *Appl.* trochlear nerve and superior oblique muscle of eye.
- pathogenic (pät'hjën'tëk) *a* [Gk. *pathos* suffering *genes* producing.] Disease producing *appl.* parasite in relation to particular host.
- pathology (pät'hët'ëj) *n*. [Gk. *pathos* suffering *logos* discourse.] Science dealing with disease and with morbid structures and functions.
- patina (pät'inäl) *n*. [L. *patina*, dish.] Circles of plates round calyx of crinoids.
- patriclinous (pät'rëkl'ëns) *a*. [L. *pater* father Gk. *klinos* to incline.] With hereditary characteristics more paternal than maternal patroclinal patrocinal.
- patulent (pät'ülënt) patulous (pät'üläs) *a*. [L. *patulus* standing open.] Spreading open expanding.
- paturon (pät'rön) *n*. [Gk. *patisin*, to tramp on *enon*, after part.] Basal joint of arachnid chelicerae used for crushing and expressing fluids of insects.



paucispiral (pó tsip'ráil) *n* [L. *paucus* few *spira* coil.] With few coils or whorls

paukospore (pó tsáp'ór) *n* [Gk. *paule* rest *spore* seed.] A resting stage in development as a cyst chlamydospore *q.s*

paunch (pómb) *n* [L. *pauitex* paunch] The rumen, an expansion of oesophagus, first stomach of ruminants.

pavement epithelium, — simple squamous epithelium of flat nucleated scales in mosaic pattern.

paxilla (pák'íl) *n* [L. *paxillus* peg] Thick plate supporting calcareous pillars summit of each covered by group of small spines in certain Stelleroids paxillous.

paxillar (pák'íl'ár) *n* [L. *paxillus* peg] *Part* a paxilla.

paxilliform (pák'íl'í'fórm) *n*. [L. *paxillus* peg *forma* shape.] Shaped lik a paxilla.

pearl (pérl) *n* [F. *perle* pearl] In shells of some Mollusca, an abnormal growth formed with grain of foreign matter or minute organism for nucleus and many thin layers of nacre surround *q.s*

pectase (pék'tík) *n* [Gk. *pektas* congealed.] An enzyme of plants which forms vegetable jelly

pect *n* (pék'tén) *n* [L. *pectus* comb] Any comb-like structure process of inner retinal surface in epithel, expanded into folded quadrangular plate in birds a ridge of superior ramus of os pubis a part of stridulating organ of certain spiders sensory abdominal appendage of scorpions the scallop a sterigma.

pecti (pék'tík) *n* [Gk. *pektas* congealed] *Appl* substances = cell-walls and cell-sap of plants including pectic acid and its salts pectin and pectone *appl* enzymes pectonase pectase and pectinase which hydrolyse pectic substances.

pectinal (pék'tínál) *n* [L. *pectus* comb] *Part* pecten

pectinat (pék'tínáit) *n* [L. *pectus* comb] Comb-like pectiniform

*appl* leaves arrangement of sporangia, a ligament of iris certain gills pedicellariae of Asteroidea, a septum between corpora cavernosa, fibres etc.

pectineal (pék'tín'ál) *n* [L. *pectus* comb.] *Appl* process of pulvis of birds *appl* a ridge-line on femur and attached muscle.

pectinellae (pék'tín'él'è) *n. pl.* [L. *pectinella* small comb.] Transverse comb-like membranellae constituting adoral ciliary spiral of some infusoria.

pectines (pék'tín'és) *n. pl.* [L. *pectus* comb] *Pls* of pecten, *q.s*

pectineus, — a flat muscle between pecten pubis and upper medial part of femur

pectiniform, — pectinate.

pectinirhomb (pék'tín'rómb) *n* [L. *pectus* comb Gk. *rhombos* wheel.] A type of sternum folding in Cypridea.

pectocellulose (pék'tó'sél'úls) *n*. [Gk. *pektas* congealed L. *cellula* small cell.] Cellulose mixed with pectose as in fleshy root and fruits.

pectoral (pék'tórál) *n* [L. *pectus* breast.] *Part* chest in chest region *appl* arch girdle fins, etc.

pectoralis major and minor, — outer and inner chest muscles connecting ventral chest wall with shoulder and humerus.

pectose (pék'tós) *n* [Gk. *pektas* congealed.] A carbohydrate constituent of plant cell-walls, converted into pectin and cellulose by action of pectonase.

pectus (pék'tós) *n* [L. *pectus* breast.] The chest or breast region (used pleuron and sternum of arthropods.

pedal (péd'ál) *n* [L. *pes* foot] *Part* foot or feet *appl* cords, ganglia, glands etc.

pedat (péd'át) *n* [L. *pes* foot.] Pedatiparous with toe-like parts.

pedatipartite (péd'át'ipár'tít) *n* [L. *pes* foot *partitus* divided] *Appl* a variety of palmate leaf with cymose branching of third order

pedatisect (pédāt'séks) [*L. per* foot *sectus* cut.] In pedate arrangement, and with divisions nearly to midrib.

pedicel (péd'sél) *n.* [*L. pediculus* small foot.] A small short foot stalk of leaf flower fruit, or sporangium foot-stalk or stem of stationary or fixed organism or of organ, as optic second segment of insect antenna pedicellus.

pedicellariae (péd'sél'ar'ia) *n. plu.* [*L. pediculus* small foot.] Minute pincer-like structures studing the surface of certain echinoderms.

pedicellate (péd'sél'it) *a.* [*L. pediculus* small foot.] Supported by pedicel or petiole *appl.* Hymenoptera with stalked abdomen of pseudoscorpion.

pedicellus (péd'sél'it's) *n.* [*L. pediculus* small foot.] A short foot stalk second joint of insect antennae pedicel.

pedicel (péd'sél) *n.* [*L. pediculus* small foot.] A short stem back ward-projecting vertebral process narrow stalk uniting cephalothorax with abdomen in arachnids.

pedipalpus (péd'ipál'pús) *n.* [*L. per* foot *palpare* to feel.] 1 Arachnoides, second cephalothoracic paired appendage, variously pincer-like claw a simple or leg-like appendage, chelate structure.

paedogamy (péd'óg'ám) *n.* [*Gk. pais* child *gamos* union] Paedogamy *q.v.*

pedogenesis, —pedogenesis *q.v.*

pedogenic (péd'ójén'ik) *a.* [*Gk. pais* child, *genesis* to produce.] Pert. the formation of soil.

pedology (péd'ól'óg'í) [*Gk. pais* child, *logos* discourse.] Soil science; of edaphology

pedonic (pédón'ik) *a.* [*Gk. pais* child, *on* ground.] *Appl.* organisms of fresh water lake-bottom.

peduncel (péd'ung'él) *n.* [*L. pedunculus* small foot.] A stem or stalk, supporting flower or fruit head of white fibres joining different parts of brain stalk of crinoids, brachiopods and bar-

nacles link between thorax and abdomen 1 arthropods stalk of sedentary protozoa.

pedunculate (péd'ung'kúlát) *a.* [*L. pedunculus* small foot.] Growing on or having peduncle *appl.* bodies groups of association cells and fibres of protocerebrum in insects, highly developed in Hymenoptera; *appl.* hydroid or appendix of epididymis pediferous.

pelage (pél'á) *n.* [*F. pelage* fur] The hairy furry or woolly coat of mammals.

pelagic (pél'áj'ik) *a.* [*L. pelagus* sea] Ocean-inhabiting

pelagic (pél'áj'ik) *a.* [*L. Pelagus* Pelagian.] Moving from place to place.

pellicle (pél'ikl) *n.* [*L. pelluculus* small skin.] The delicate protective investment of protozoa any filmy protective covering pellicle.

pelliculat (pél'ik'ulát) *a.* [*L. pelluculus* small skin.] Having a pellicle on external surface.

pellions (pél'yóns) *n. plu.* [*Gk. pellos* cup] Ring of plates supporting sockets of echinoids rosettes.

pelma (pél'má) *n.* [*Gk. pelma*, sole.] The sole of foot plants.

pelophilous (pél'ófil's) *a.* [*Gk. phileo* clay *phileo* to love.] Growing on clay

peloria (pél'ó'ria) *n.* [*Gk. pelorios* monstrous.] Condition of abnormal regularity modification of structure from irregularity to regularity

peloric (pél'ó'rik) *a.* [*Gk. pelorios* monstrous.] *Appl.* flower which normally irregular becomes regular

pelita (pél'it's) *n.* [*Gk. pellos* shield.] The shield-like pothecium of certain lichens.

plato (pél'it's) *n.* [*Gk. pellos* shield.] Shield-shaped fastened to stalk at point within margin as a leaf.

pelvi (pél'vik) *a.* [*L. pelvis* basin.] Pert. or situated at or near pelvis *appl.* girdle, cavity fin limba, plexus, etc.

pelvis (pél'vís) *n*. [*L. pelvis* basin.]

The bony cavity formed by pelvic girdle along with coccyx and sacrum expansion of ureter at its junction with kidney basal portion of cup of crinoids.

pelvisternum (pél'vístér'núm) *n*. [*L. pelvis* basin *L. sternum* breast base.] Epipubis separat from pubes.

pen (pén) *n*. [*L. penus* feather] A leaf midrib gladius of certain Cephalopoda.

pendent (pén'dent) *a*. [*L. pendens* hanging down] Hanging down as certain lichens, leaves flowers etc.

pendulous (pén'dúls) *a*. [*L. pendulus* to hang] Bending downwards from point of origin overhanging *appl* ovules, branches, flowers, etc.

penetrance (pén'étráns) *n*. [*L. penetrare* to penetrate.] The frequency measured as a percentage, with which a gene shows any effect.

penial setae, —paired needle-like chitinous bodies at nematode anus setae near aperture of vas deferens in earthworms.

penicillate (pén'isil'át) *a*. [*L. penicillum* painter's brush] Penicilliform pencil-shaped tipped with hairs having a structure like a camel-hair or bottle brush.

penicillus (pén'isil'ús) *n*. [*L. penicillus* painter's brush] A brush shaped structure as certain type of nematocyst tuft of hairs of tegumen a tuft of arterioles in spleen.

penis (pén'is) *n*. [*L. penis* penis] The male copulatory organ.

penaceous (pén'ákshés) *a*. [*L. penus*, feather] Penniform *lik* a plume or feather *appl* feathers with hamuli on barbules *appl* plumose.

penate, —pennat

Pennsylvanian (pén'silv'nián) *a* [*Pennsylvanian*] *Appl* and *pent* an epoch of the Carboniferous era *appl* fossils in American coal-measures.

pentacapsular (pén'tákáp'súlá) *a*

[*Gk. pente* five *L. capsula* capsule.] With five capsules.

pentacarpellary (pén'tákár'péllár') *a*. [*Gk. pente* five *carpellos* fruit.] With five carpels.

pentachenium (pén'ták'éniúm) *n*. [*Gk. pente* five *a* not *hasmen* to gape.] A form of schizocarp with five carpels.

pentacoccos (pén'tákók'ós) *a*. [*Gk. pente* five; *kokkos* kernel.] With five seeds or carpels.

pentacrinoid (pén'tákrinóid') *a*. [*Gk. pente* five *crinus* lily rider form.] Resembling a Protocrinus *appl* larval stage of feather-stars.

pentactinal (pén'ták'tínál) *a*. [*Gk. pente* five *aktis* ray] Five rayed five-branched.

pentacula (pén'tákú'lá) *n*. [*Gk. pente* five *L. aculeus* prickle.] In life-history of echinoderms, the stage with five tentacles.

pentacyclic (pén'tákíklík) *a*. [*Gk. pente* five *kyklos* circle.] Arranged in five whorls.

pentadactyl (pén'tádák'tíl) *a*. [*Gk. pente* five *daktylos* finger] Having all four limbs normal terminating in five digits.

pentadiphus (pén'tádífil'ús) *a*. [*Gk. pente* five *diplos* brother] Having five clusters of more or less united filaments.

pentad (pén'tádk) *a*. [*Gk. pente* five *L. fender* to cleave.] In five divisions or lobes.

pentagonal (pén'tág'ónál) *a*. [*Gk. pente* five *gonos* angle.] *Appl* symmetry of pentamerous flowers quinary having five angles.

pentagynous (pén'tág'ínús) *a*. [*Gk. pente* five *gyné* woman] Having five styles.

pentamerous (pén'tám'éris) *a*. [*Gk. pente* five *meros* part.] Composed of five parts in whorls five a multiple of five.

pentandrous (pén'tánd'rús) *a*. [*Gk. pente* five *aner* male] Having five stamens.

pentapetalus (pén'táptét'álús) [*Gk. pente* five *petalon* leaf] Having five petals.

- pentaploid (pĕnt'ăploid) *a.* [Gk. *pentē*, five *haplos* simple; *eidos* form.] With five sets of chromosomes having five times the monoploid chromosome number.
- pentapterous (pĕntăp'tĕrĕs) *a.* [Gk. *pentē* five; *pteron* wing] With five wings, as some fruits.
- pentarch (pĕnt'ărk) *a.* [Gk. *pentē* five *archē* beginning] With five alternating xylem and phloem groups.
- pentasepalous (pĕnt'sĕp'ălŭs) *a.* [Gk. *pentē* five *F sepala* sepal.] Having five sepals.
- pentastichous (pĕntăst'ĭkŭs) *a.* [Gk. *pentē* five *stichos* row] Arranged in five vertical rows.
- pepo (pĕp'ŏ) *n.* [Gk. *pepon* melon.] An inferior one-celled, many-seeded pulpy fruit, as of Cucurbitaceae.
- pepsin (pĕp'sĭn) *n.* [Gk. *pepsis* digestion.] An enzyme secreted by stomach, acting with hydrochloric acid, on proteins also secreted by some insectivorous plants.
- peptic (pĕp'tĭk) *a.* [Gk. *peptōn*, to digest.] Relating to or promoting digestion *appl.* pepsin-secreting glands of stomach.
- peptonaphridia (pĕptŏnăfrĭd'ĭă) *n. pl.* [Gk. *peptōn* digestion; *nephros* kidney] The anterior nephridia which function as digestive glands, of some Obolocheta.
- perae pods, peridopods.
- percnosom (pĕrk'nŏsŏm) *n.* [Gk. *perkos* dark; *soma*, body] Deeply staining granule of an androcyte, possibly chromatoid accessory body.
- percurrent (pĕrkŭr'ĕnt) *a.* [L. *percurrere* running through.] Extending throughout length, or from base to apex.
- perelon (pĕr'ŏn) *n.* [Gk. *pereloneos* to convey] The thorax of Crustacea.
- perleopods (pĕr'ŏpŏd) *n. pl.* [Gk. *pereloneos* to convey *pod* foot.] The locomotory thoracic limbs of Malacostraca trunk-legs.
- perennation (pĕr'ĕnăshĕn) *n.* [L. *per* through *annus* year] Condi-
- tion of living for number of years.
- perennial (pĕrĕn'ĭăl) *a.* [L. *per* through; *annus* year] Persisting through the year or for number of years.
- perennibranchiate (pĕrĕn'brăŋ'kĭăt) *a.* [L. *per* through *annus* year *branchia* gills.] Having gills persisting throughout life as certain amphibians.
- perfect (pĕr'ĕkt) *a.* [L. *perfectus* finished.] Complete *appl.* flower with both stamens and pistil *appl.* fungi producing sexual spores.
- perfoliate (pĕr'ŏlĭăt) *a.* [L. *per* through *folium* leaf] *Appl.* leaf with basal lobes so united as to appear as if stem ran through it.
- perforate (pĕr'fŏrăt) *a.* [L. *perforare* to bore through.] Having pores as corals, foraminifera, some leaves *appl.* certain areas of brain perforated by small blood-vessels.
- perforation plat —perforate septum or area of contact between cells or elements of wood-vessels.
- perforator (pĕr'fŏrătŏr) *n.* [L. *perforare* to bore through.] A barbed spear-like head and process of some spermatozoa, as of salamander.
- perforatorium (pĕr'fŏrătŏrĭŭm) *n.* [L. *perforare* to bore through.] The acrosome *q.s.* acrosom with galea capitis.
- perhydridase (pĕrĭd'rĭdăs) *n.* [L. *per* through Gk. *hydra* water] An enzyme which causes activation of perhydride hydrogen.
- perianth (pĕr'ĭănth) *n.* [Gk. *peri* around *anthos* flower] A floral envelope external floral whorls, including calyx and corolla cover or ring of cells surrounding archegonium in Marchantiales.
- periblast (pĕr'ĭblăst) *n.* [Gk. *peri* around *blastos* bud.] The outside layer epiblast, or blastoderm of an insect embryo.
- periblasti (pĕrĭblăst'ĭk) *n.* [Gk. *peri* around *blastos* bud.] *Part.* periblast superficial *as appl.* segmentation.

**periblastula** (pér'íblas'tála) *n* [Gk. *peri* around *blasto* bud.] A blastula resulting from periblastic segmentation.

**periblem** (pér'íblém) *n* [Gk. *peri* around *hème* coverlet.] Layers of ground or fundamental tissue between dermatogen and pterome of growing points.

**peribranchial** (pér'íbrāŋ'kiāl) *n*. [Gk. *peri* around *branchia* gills.] Around gills *appl* type of gemmation in ascidians *appl* airtial cavity in ascidians and lancelets *appl* circular spaces surrounding basal parts of papulae of Asteroidea.

**peribulbar** (pér'íbul'bār) *n*. [Gk. *peri* around *L. bulbus* bulb.] Surrounding the eye-ball *perigeramul* *f*.

**pericardiac** (pér'íkár'diák) *pericardial* (pér'íkár'diāl) *n* [Gk. *peri* around *harta* heart.] *Peri* pericardium surrounding heart *appl* cavity septum *appl* paired excretory glands in lamellibranchs

**pericardium** (pér'íkár'diúm) *n* [Gk. *peri* around *harta* heart.] The cavity containing heart membrane enveloping heart

**pericarp** (pér'íkárp) *n* [Gk. *peri* around *karpos* fruit.] The ovary walls of fruit *a* fruit covering

**pericellular** (pér'íkél'ulār) *n* [Gk. *peri* around *L. cellula* small cell.] Surrounding a cell *appl* net of glial origin surrounding neurocyton.

**pericentral** (pér'ítsen'trāl) *n* [Gk. *peri* around *L. centrum* centre.] Round or near centre *appl* auxiliary cell *as* *n* certain algae

**pericentric** (pér'ítsen'trík) *n*. [Gk. *peri* around *hentrum* centr.] *Appl* breaks *n* arms of a chromosome on either side of centromere heterobrachial.

**perichaetial** (pér'íké'shiāl 'siāl) *n* [Gk. *peri* around *hais* hair.] *Peri* perichaetium *appl* leaves.

**perichaetium** (pér'íké'shióm, 'tíúm) *n*. [Gk. *peri* around *chaete* hair.] One of membranes or leaves en-

veloping rhogonia or antheridia of bryophytes.

**perichondral** (pér'íkōn'drāl) *n*. [Gk. *peri* around *chondros* cartilage.] *Appl* ossification in cartilage from without inwards of endochondral.

**perichondrium** (pér'íkōn'drím) *n*. [Gk. *peri* around *chondros* cartilage.] A fibrous membrane that covers cartilages

**perichordal** (pér'íkōr'dāl) *n*. [Gk. *peri* around *horda* cord.] Enveloping or near the notochord.

**perichoroidal** (pér'íkōr'oidāl) *n* [Gk. *peri* around *hōron* skin *oides* form.] Surrounding the choroid *appl* lymph-space perichoroidal.

**perichrome** (pér'íkroen) *n*. [Gk. *peri* around *chroma* colour.] Having Nissl bodies arranged near periphery of nerve cell body *as* *n* molecule layer of cerebellar cortex.

**perichyous** (pér'íkri'ūs) *n* [Gk. *peri* around *hylos* juice.] With water-storage cells outside chlorenchyma.

**pericladium** (pér'íkliā'diúm) *n* [Gk. *peri* around *hanta* branch.] The lowermost clasping portion of abscising petiole.

**periclinial** (pér'íkli'nāl) *n* [Gk. *peri* around *hí men* to bend.] *Appl* system of cells parallel to surface of apex of a growing point *appl* graft hybrids or chimaeras with inner tissue *f* on petals surrounded by epidermis of the other

**periclinium** (pér'íkli'níúm) *n* [Gk. *peri* round *híme* bed.] The involucre of composite flower

**pericranium** (pér'íkri'níúm) *n* [Gk. *peri* around *hramion* skull.] Fibrous membrane vesting skull; perosternum of skull

**pericycl** (pér'íkí'kl) *n* [Gk. *peri* around *hýklos* circle.] The external layer of atele the layer between endodermis and conducting tissues.

**pericyte** (pér'íts) *n*. [Gk. *peri* around *hýklo* hollow.] A macrophage *n* adventitia of small blood vessels Rouget cell.

- peridental (pér'idén'tál) *n.* [Gk. *peri* around *L. dens* tooth.] Periodontal investing tooth.
- periderm (pér'idém) *n.* [Gk. *peri* around *derma*, skin.] The outer layer of bark epiphloem; external cuticular layer of Hydruzoa cell layer of epidermis shed later epitrachium of mammals.
- peridesm (pér'idém) *n.* [Gk. *peri* around *desme* bundle.] Tissue surrounding vascular bundle.
- peridesmium (pér'idés'mítum) *n.* [Gk. *peri* around; *desmes* band.] Tissue surrounding ligament.
- peridial (pér'idíál) *n.* [Gk. *peri-dion*, small wallet.] *Peri*, a peridium.
- perididymia (pér'idíd'ímí) *n.* [Gk. *peri*, around *didymos* testicle.] The tunica albuginea or fibrous covering of testis.
- peridioleum (pér'idíó'íum) *n.* [Deriv. of Gk. *peridion* small wallet.] A small peridium or collection of spores enclosed within peridial covering peridiole.
- peridium (pér'idítum) *n.* [Gk. *peri-dion* small wallet.] The coat investing the sporophore of fungi outer covering of a puff-ball cortex of hyphae.
- peridural (pér'idú'ril) *n.* [Gk. *peri* around *L. duros* hard.] *Appl.* perineuronal space at later stage of development.
- perienteric (pér'íntér'ík) *n.* [Gk. *peri* around *enteron*, gut.] Surrounding the enteron.
- periterson (pér'ítér'són) *n.* [Gk. *peri*, around *enteron* gut.] A cavity surrounding the enteron visceral cavity in embryo.
- perilary (pér'ilá'rí) *n.* [Gk. *peri* around *L. folium* leaf.] Round leaf margin.
- periganglionic (pér'ígáng'glíón'ík) *n.* [Gk. *peri* around *ganglion*, little tumour.] Surrounding ganglion *appl.* glands or calcareous bodies, or glands of Swammerdam, paired outgrowths of prolonged saccus endolymphaticus, on each side of vertebral column as in frog.
- perigastric (pér'ígás'trík) *n.* [Gk.

- peri* around *gaster* stomach.] Surrounding the viscera *appl.* abdominal cavity.
- perigastri *m.* (pér'ígás'tríóm) *n.* [Gk. *peri*, round *gaster* stomach.] The body cavity or coelom.
- perigastrula (pér'ígás'tróólá) *n.* [Gk. *peri* round *gaster* stomach.] The gastrula resulting after superficial segmentation.
- perigemmal (pér'jém'al) *n.* [Gk. *peri*, around *L. gemma*, bud.] Surrounding taste-bud *appl.* nerve fibres, spines.
- perigonium (pér'ígón'íum) *n.* [Gk. *peri*, around *gonos* seed.] A floral envelope or perianth involucre round antheridium of mosses; gonotheca perigone.
- perigynium (pér'jín'íum) *n.* [Gk. *peri* around *gyns* female.] Frond investing utricle of *Carex* membranous envelope of archegonium in liverworts.
- perigynous (pér'jín'ús) *n.* [Gk. *peri* around *gyns* female.] Having sepals, petals, stamens round the gynoecium.
- perigyny (pér'jín'í) *n.* [Gk. *peri*, around *gyns* female.] Arrangement in a perigynous manner.
- peritha mal (pér'ítér'mál) *n.* [Gk. *peri* around *haima*, blood.] *Appl.* blood-vascular system of canals and spaces of Echinodermata *appl.* dorsal outgrowths of third body-cavity of Enteropneusta.
- perikaryon (pér'íkár'íon) *n.* [Gk. *peri*, around *karyon* nucleus.] Protoplasm surrounding nucleus in nerve cell body of cyton.
- perilymph (pér'ilím'f) *n.* [Gk. *peri*, round *L. lymphe*, water.] A fluid separating membranous from osseous labyrinth of ear.
- perimedullary (pér'imédúl'lá'rí) *n.* [Gk. *peri* around *L. medulla* marrow.] Surrounding the pith of stem *appl.* roots.
- perimeningeal (pér'iménín'jál) *n.* [Gk. *peri*, around; *meninx* membrane.] *Appl.* space between endochachis and meninx primitiva or spinal cord envelope.

**perimetrium** (pēr'mē'trīſm) *n* [Gk. *peri* around *metra* womb.] The peritoneal covering of the uterus.

**perimysium** (pēr'imī'siſm) *n* [Gk. *peri* around *mys* muscle.] Connective tissue binding numbers of fibres into bundles and muscles, and continuing into tendons alternately *appl.* only to fasciculi envelopes of epimysium.

**perinaeal** (pēr'īnē'āl) *n* [Gk. *peri* around *naos* part between anus and scrotum.] *Peri* perineum *appl.* artery body nerve gland perineal.

**perinaeum** (pēr'īnē'ſm) *n* [Gk. *perinaeum* part between anus and scrotum.] A surface of body limited by scrotum or vulva in front, anus behind, and laterally by medial side of thigh perineum.

**perinephrium** (pēr'īnē'rīſm) *n* [Gk. *peri* around *nephras* kidney.] The enveloping tissue of kidney.

**perineurium** (pēr'īnē'rīſm) *n* [Gk. *peri* round *neurion* nerve.] The tubular sheath of a small bundle of nerve fibres.

**perineuronal** (pēr'īnē'ronāl) *n* [Gk. *peri* around *neurion* nerve.] Surrounding nerve cell or nerve cells.

**perialum** (pēr'ī'ſm) *n* [Gk. *peri* round / fibre.] An epispore or outer macrospore-coating of certain Pteridophyta.

**periodicity** (pēr'īōdī'siſm) *n* [Gk. *perios* circuit.] The fulfilment of functions at regular periods or intervals rhythm.

**periodontal** (pēr'īōdōn'tāl) *n* [Gk. *peri* round *odontos* tooth.] Covering or surrounding a tooth *appl.* membrane etc.

**periesophageal** (pēr'ī'sōfē'āl) *n* [Gk. *peri* around *esophagus* gullet.] Surrounding oesophagus *appl.* nerve ring.

**periopt** (pēr'īōp) *n* [Gk. *peri* round *optikon* shield.] Thin outer layer of the hoof of equines.

**periopticum** (pēr'īōp'tikſm) *n* [Gk. *peri* round *optis* sight.] In insects the zone of optic lobes nearest the eye.

**perionteum** (pēr'īōn'tēſm) *n* [Gk. *peri* around *osteon* bone.] The fibrous membrane investing the surface of bones.

**periostracum** (pēr'īōs'trākſm) *n* [Gk. *peri* around *ostrakon* shell.] The chitinous external layer of most mollusc shells.

**periotic** (pēr'īō'tik) *n* [Gk. *peri* around *ous* ear.] A cranial bone enclosing parts of membranous labyrinth of internal ear.

**peripetalous** (pēr'īpēt'ālſm) *n* [Gk. *peri* around *petala* leaf.] Surrounding petals or petaloid structure.

**peripharyngeal** (pēr'īfār'jē'āl) *n* [Gk. *peri* round *pharynx* gullet.] Encircling or surrounding pharynx *appl.* cilia of acidoblasts and lancelets.

**peripheral** (pēr'īfēr'āl) *n* [Gk. *peri* *pherein* to move round.] Distant from centre near circumference *appl.* end-organs of nerves nervous system.

**periphrical** (pēr'īfēr'ikāl) *n* [Gk. *peripherein* to move round.] *Appl.* an embryo more or less completely surrounding endosperm in seed.

**periphloem** (pēr'īfō'ſm) *n* [Gk. *peri* around *phloem* smooth bark.] Phloem sheath pericambium.

**periphloic** (pēr'īfō'tik) *n* [Gk. *peri* around *phloem* inner bark.] *Peri* periphloem having phloem outside centre xylem, *appl.* bundles amphiphloic *Opp.* perixyletic.

**periphloanthium** (pēr'īfōr'ān'thīſm) *n* [Gk. *peri* around *phloem* to bear *anthos* flower.] Involucres of Compositae.

**periphorum** (pēr'īfō'rſm) *n* [Gk. *peri* around *phoron* to bear.] Fleishy structure supporting ovary and to which stamens and ocellus are attached.

**periphylla** (pēr'īfī'ſm) *n* [Gk. *peri* round *phylla* is growth.] In certain fungi a filament branching from a hymenium without ascus.

**periplasm** (pēr'īplāzm) *n* [Gk. *peri* round *plasma* mould.] The

- region of an oogonium outside the oosphere in fungi: centroplasma, *q.s.*
- periplasmodium (pēr'plāzmō'diŭm) *n.* [Gk. *peri* around *plasma* model, *oides* form.] Protoplasmic mass, derived from tapetal cells and enclosing developing spores.
- periplast (pēr'plāst) *n.* [Gk. *peri* around *plastos* moulded.] Centrosome attraction-sphere; ectoplasm of flagellates: pellicle covering ectoplasm: inter-cellular substance or stroma of thallus.
- peripneustic (pēr'pni'stik, -pnŭs) *a.* [Gk. *peri* around *pneustikos* *peri* breathing.] Having stigmata arranged along sides of body: normal in insect larvae.
- periproct (pēr'iprōkt) *n.* [Gk. *peri* round *proctos* anus.] The surface immediately surrounding anus of echinoids.
- perisarc (pēr'sārk) *n.* [Gk. *peri*, around *sarx* flesh.] The tough outer membrane of Hydrozoa.
- periscleral (pēr'sklēr'al) *a.* [Gk. *peri*, around *skleros* hard.] *Appl.* lymph-space external to sclera of eye.
- perisoma (pēr'sōm) *n.* [Gk. *peri* around *sōma*, body.] A body wall: integument of echinoderms.
- perisperm (pēr'ispērm) *n.* [Gk. *peri* around *sperma*, seed.] The remains of nucellus of ovule when it is not all absorbed during development of embryo: pericarp of seed.
- perispiracular (pēr'spirāk'ylār) *a.* [Gk. *peri* around; *L. spiraculum* air-hole.] Surrounding spiracle: *appl.* glands with oily secretion, in certain aquatic insect larvae: peristigmatic.
- perisporangium (pēr'spōrānj'ijūm) *n.* [Gk. *peri* around *sporos* seed *angium*, vessel.] Membrane covering sorus; indusium of ferns.
- perispore (pēr'spōr) *n.* [Gk. *peri* around *spora* seed.] Spore covering mother cell in algal spores.
- perisaodactyl (pēr'sōdākt'yl) *a.* [Gk.

- perissos* odd *dactyles* finger.] With uneven number of digits.
- peristalsis (pēr'bstāl'sis) *n.* [Gk. *peri* around *stallein* to draw in.] Movement of muscular tubes as of digestive tract, by means of successive contractions in a definite, usually anteroposterior direction.
- peristaltic (pēr'bstāl'tik) *a.* [Gk. *peri* around *stallein* to draw in.] *Appl.* movement by means of successive contractions of muscular walls of tubular structures.
- peristasis (pēr'stās'is) *n.* [Gk. *peri* around *stasis* standing.] Environment, including physiological action within the organism, vital to development of particular genotype.
- peristati (pēr'bstāl'tik) *a.* [Gk. *peri* around *statis* standing.] *Peri* influenced by peristasis.
- peristethal m (pēr'stēth'ijūm) *n.* [Gk. *peri* round *stethos* chest.] An insect mesosternum.
- peristigmatic, —perispiracular *q.s.*
- peristome (pēr'stōm) *n.* [Gk. *peri* around *stoma*, mouth.] The region surrounding mouth: used in connection with mosses, Vorticella, Actinosea, annulate insects.
- peristylol (pēr'stīl'ol) *n.* [Gk. *peri* around *stylol* drawing together.] The interval elapsing between diastole and systole of heart.
- perithecium (pēr'thē'ijūm) *n.* [Gk. *peri* around *thēke* case.] A flask-shaped ascocarp with terminal ostiole in fungi.
- perithallium (pēr'thē'ijūm) *n.* [Gk. *peri* around *thalle* nappe.] Connective tissue associated with capillaries.
- peritoneal (pēr'tōnē'al) *a.* [Gk. *peri* round *teinein*, to stretch.] *Peri* peritoneum: *appl.* cavity, fossa, membrane etc. *appl.* funnel coelostome of archinephros.
- peritoneum (pēr'tōnē'ijūm) *n.* [Gk. *peri* round *teinein* to stretch.] A serous membrane partly applied to abdominal walls, partly reflected over contained viscera.



**peritreme** (pér'túrēm) *n* [Gk. *peri* around *treme* hole.] Margin of a shell-opening small plate perforated by spumose-opening in ticks and insects

**peritrichous** (pért'ríkūs) *a* [Gk. *peri* around *trich* hair] Having adoral band of cilia arranged in a spiral as in *Vorticella* having several flagella attached laterally as in certain bacteria. *peritrichal* *peritrichic*

**peritrochium** (pér'trób'kiúm) *n* [Gk. *peri* round *trochos* wheel] A ciliary band a circularly ciliated larva.

**peritrophal** (pér'trób'fík) *a*. [Gk. *peri* round *trophos* food.] *Appl* A fold of membrane in mid-gut of insects and space between it and gut lining

**perirethral** (pér'tú f'thrál) *a*. [Gk. *peri* round *rethron* from *urine* urine] Surrounding the urethra *appl* glands homologous of prostate

**perivascular** (pér'vásk'ulár) *a*. [Gk. *peri* around *L. vasculum* small vessel] Surrounding the vascular cylinder *appl* fibres surrounding the blood-vessels *appl* lymph channels.

**per visc al** (pé 'vis erál) *a*. [Gk. *peri* around *L. viscera* bowels] Surrounding the viscera *appl* body cavity

**perivitellin** (pér'vítel'ín) *a* [Gk. *peri* around *L. vitellus* yolk of egg] Surrounding the yolk of an egg *appl* space between ovum and zona pellucida.

**perixyle** (pér'íxík) *a*. [Gk. *peri* around *xylem* wood] Having xylem outside centric phloem *appl* bundles amphixyle *Opp* *periphloic*.

**perizonium** (pér'ízón'íúm) *n* [Gk. *peri* around *zona* girdle.] The membrane or silicious wall enveloping the auxospore *zygote* *n* *diatom*.

**permanent cartilag** — cartilage which remains unossified throughout life, *appl* temporary

**permanent teeth**, set of teeth de-

veloped after milk or deciduous dentition, second set of most, third set of some first set of other mammals. **permanent tissue**, — tissue consisting of cells which have completed their period of growth and subsequently change little until they lose their protoplasm and die.

**Permian** (pér'mián) *a*. [From *E. Russia*.] *Peri* late period of Palaeozoic era, following the Carboniferous.

**peronate** (pér'óat) *a* [*L. peronatus* round-booted.] Covered with woolly hairs powdery or mealy externally

**peroneal** (pér'ón'eál) *a*. [Gk. *perone* fibula.] *Peri* or lying near the fibula *appl* artery nerve retinacula, tubercle.

**peroneotibial** (pér'ón'eó'tíb'eál) *a*. [Gk. *perone* fibula *L. tibia*, tibia.] In region of fibula and tibia; *appl* certain muscles

**peroneus** (pér'ón'e'ús) *n* [Gk. *perone* fibula.] Two lateral muscles of the leg *longus* and *brevis* and an anterior muscle tertius *peronatus*.

**peronium** (pér'ón'íúm) *n* [Gk. *perone* fibula.] In Trachomedusae one of the mantle-ribs, or cartilaginous processes ascending from disc margin towards centre

**peropod** (pér'ópód) *a* [Gk. *peros* defective *peris* foot.] With rudimentary limbs.

**peroral** (pér'ó'rál) *a*. [*L. per* through *os* mouth] *Appl* a membrane formed by concrescence of rows of cilia, in infusoria

**peroxidase** (pért'ók'sídás) *n* [*L. per* through *Gk. sy* sharp] An enzyme which causes activation of peroxide oxygen

**perradius** (pér'rá'diús) *n* [*L. per* through *radius* radius.] One of four primary radii of coelenterates.

**perseveration** (pér'sév'érá'shén) *n* [*L. perseverare* to persist.] Tendency of set of neurones to remain in a state of excitation persistent response after cessation of original stimulus.

**persistent** (pér'sístén) *a*. [*L. per* *manere* to persevere] Remaining

- attached till maturation = corolla  
*appl.* teeth with continuous growth  
*appl.* organs or parts in adult which normally disappear with larval stage or youth as gills.
- person (pér'són) *n.* [*L. persona*, person.] An individual or zooid of colony
- personate (pér'sónat) *a.* [*L. personatus* masked.] Masked *appl.* corolla of two lips, closely approximated and with projection of the lower closing the throat of the corolla.
- perspiration (pér'spirá'shún) *n.* [*L. per* through *spirare* to breathe.] Excretion or excretion through pores of skin.
- perforate (pér'tsít) *a.* [*L. perforatus* thrust through.] Pierced at apex.
- perla (pér'ülá) *n.* [*Dim.* of *L. perla* wallet.] A leaf-bud scale.
- pervalvar (pér'vál'vár) *a.* [*L. per* through; *valvus* folding-doors.] Dividing valve longitudinally
- pervious (pér'viús) *a.* [*L. per* through *via* way] Perforated
- permeable *appl.* nostrils with no septum between nasal cavities.
- pes (pés) *n.* [*L. per* foot.] A foot, base or foot-like structure, as certain parts of brain branches of facial nerve.
- ossaline (pér'sílt) *n.* [*L. ossalis* bone.] An internal skeletal element in syringe of some birds.
- petal (pér'ál) *n.* [*Gk. petalon* leaf] One of the parts of corolla.
- petaliform (pér'áltí'fórm) *a.* [*Gk. petalon* leaf *L. forma* shape] Petal-shaped petal-like, petaloid, petaline.
- petaloid (pér'áld) *a.* [*Gk. petalon* leaf.] With petals petaliferous, *appl.* apetalous.
- petalody (pér'áldís) *n.* [*Gk. petalon*, leaf *oides* form] Conversion of other parts of flower into petals
- petaloid (pér'áld) *a.* [*Gk. petalon* leaf; *oides* form.] Like petal *appl.* perianth *appl.* ambulacral areas of certain echinoderms.
- petaloidous (pér'áld'ús) *a.* [*Gk. petalon*, leaf; *oides* form.] Petaloid; *appl.* monocotyledons with coloured perianth
- petasma (pét'ásmá) *n.* [*Gk. petasma* anything spread out.] A complicated membranous plate on inner side of peduncle with interlocking coupling hooks, an apparatus of certain Crustacea.
- petiolar (pét'íklár) *a.* [*L. petiolus* small foot.] *Part.* having or growing on a small stalk.
- petiolat (pét'íklát) *a.* [*L. petiolus* small foot.] Growing on, or provided with, a petiole having thorax and abdomen connected by petiole.
- petiol (pét'íál) *n.* [*L. petiolus* small foot.] The foot-stalk of a leaf a slender stalk connecting thorax and abdomen in insects small sclerite at base of palpal organ in spiders flattened and modified barb base in feathers.
- petiolal (pét'íklál) *n.* [*Dim.* of *L. petiolus* small foot] The foot stalk of leaflet of compound leaf.
- Petit' canal,—spatia zonularia, *g.s.*
- petrifaction (pét'rífák'shún) *n.* [*L. petra*, rock *facere* to make.] Fossilization through saturation by mineral matter in solution, subsequently turned to solid form.
- petrohyoid (pét'róhí'óid) *a.* [*Gk. petros* stone *hyoides* Y-shaped.] *Part.* hyoid and petrous part of temporal.
- petromastoid (pét'rómá'stoid) *a.* [*Gk. petros* stone *mastoid* breast; *oides* form.] *Part.* mastoid process and petrous portion of temporal.
- petro-occipital (pét'ró-ók'íp'tál) *a.* [*Gk. petros* stone *L. occiput* back of head.] *Part.* occipital and petrous part of temporal *appl.* fissure.
- petrophyt (pét'rófít) [*Gk. petros* stone *phytan* plant.] A rock plant.
- petrosal (pét'ró'sál) *a.* [*Gk. petros* stone.] Of compact bone *appl.* otic bones of fishes *appl.* a sphemoidal process, to a ganglion of glossopharyngeal, to nerves and sinus in region of petrous portion of temporal bone *appl.* bone, the petrotic.

**petrosphenoidal** (pét'rôsfênôid'âl) *a.* [Gk. *petras* stone *sphên* wedge *eides* form.] *Part.* sphenoid and petrous part of temporal *appt* a fissure.

**petrosquamosal** (pét'rôskwâmô'sâl) *a.* [Gk. *petras* stone *L. squama* scale] *Part.* squamosal and petrous part of temporal *appt* sinus and suture petrosquamous.

**petrotympani** (pét'rôtimpân'ik) *a.* [Gk. *petr* stone *tympanon* drum.] *Part.* tympanum and petrous portion of temporal *appt* a fissure.

**petrous** (pét'rô's) *a.* [Gk. *petras* stone.] Very hard or stony *appt* a pyramidal portion of temporal bone between sphenoid and occipital *appt* a ganglion on its lower border petrosal.

**Peyer's glands or patches** [*J. C. Peyer* Swiss anatomist]. Aggregated glands, roundish patches of aggregated lymphatic nodules on intestine walls.

**Pfäuger's cords** [*E. F. IV Pfäuger* German physiologist]. C II columns growing from the germinal epithelium into the stroma, and which give rise to gonads.

**pH**—the negative value of the power to which 10 is raised in order to obtain the concentration of hydrogen ions in gram-molecules per litre *pH* of neutral solution being 7 *pH* of acid solutions is smaller than 7 *pH* of alkaline solutions being greater than 7

**phacella** (fâ'sel'â) *n.* [Gk. *phakelos* bundle of faggots] A delicate filament with mesogloea core and ppled with stinging capsules occurring in rows stomach of certain ocelenterates gastric filament

**phacocyst** (fâ'kô'st) *n.* [Gk. *phakos* lentil lens *kystis* bladder] Transparent sac enclosing lens of eye capsule of the lens *capsula lentis*

**phacoid** (fâ'kô'id) *a.* [Gk. *phakos* lentil *eides* form] Lentil-shaped

**phaeic**—phaeoch *ou*

**phaeism** (fâ'izm) *n.* [Gk. *phaeos* dusky] Duskeness *appt* colouring of butterflies

**phaeno**—also **pheno**  
**phaenogam** (fên'ô'gâm) *n.* [Gk. *phaino* to show *gamos* marriage.] Phanerogam.

**phaeochrome** (fê'dô'krôn) *n.* [Gk. *phaios* dusky *chroma* colour.] Chromophil chromaffin.

**phaeochromoblast** (fê'dô'krô'môblô'st) *n.* [Gk. *phaios* dusky *chroma* colour *blastos* bud] Cell which develops into a phaeochromocyte or chromaffin cell.

**phaeochrous** (fê'dô'krô's) *a.* [Gk. *phaios* dusky *chros* colour] Of dusky colour **phaeic**.

**phaeodism** (fê'dô'dîzm) *n.* [Gk. *phaios* dusky *eides* form.] In certain Radiolaria, an aggregation of food and excretory substances forming a mass round the central capsule aperture.

**phaeomelanin** (fê'dô'mel'ânin) *n.* [Gk. *phaios* dusky *melas* black.] A brownish melanin of eumelanin.

**phaeophyll** (fê'dô'fîl) *n.* [Gk. *phaios* dusky *phyllon* leaf.] The colouring matter of brown algae.

**phaeoplast** (fê'dô'plô'st) *n.* [Gk. *phaios* dusky *plastikos* formed] Chromoplast of brown seaweeds or Phaeophyceae.

**phag** (fâ) *n.* [Gk. *phagō* to eat.] An agent causing destruction or lysis of micro-organisms **bacteriophage**

**phagocytale** (fâ'gô'sit'âl) *a.* [Gk. *phagō* to eat *kystis* hollow] *appt* bacteria rendered more easily ingested by leucocytes.

**phagocyte** (fâ'gô'set) *n.* [Gk. *phagō* to eat *kystis* hollow] A colourless blood-corpuscle which tends to ingest foreign particles root cell with lobed nucleus capable of digesting endotrophic fungal filaments. *a.* Phagocytic.

**phagocytosis** (fâ'gô'sitô'sis) *n.* [Gk. *phagō* to eat *kystis* hollow] The agression and destruction of microparasites by phagocytes.

**phagolysis** (fâ'gô'lî'sis) *n.* [Gk. *phagō* to eat *lysis* loosing] Dissolution of phagocytes.

- phagocytosis (fag'ōsītis) *n* [Gk. *phagōn*, to eat *some* animal.] An animal which feeds on disintegrating or dead tissue.
- phalange (fāl'ānj) *n* [Gk. *phalāngx* line of battle.] A phalanx.
- phalangeal (fāl'ānj'ēl) *a*. [Gk. *phalāngx* line of battle.] *Part* or resembling, phalanges; *appl* bones, orils attached in rows to Corti's rods etc.
- phalanx (fāl'āngks) *n*, phalanges (fāl'ānj'ēts) *pl*. [Gk. *phalāngx* line of battle.] Segments of digits of vertebrates bundle of stamens united by filaments.
- phallomere (fāl'ōmēr) *n* [Gk. *phallōs* penis *some* part.] Penis valve, in insects.
- phallosome (fāl'ōsōm) *n*. [Gk. *phallōs* penis *some* body.] A structure of tissue from inner surface of basistyles and penis valves, in Cubellidae mesosome.
- phallus (fāl'ōs) *n*. [Gk. *phallōs* penis.] The embryonic structure which becomes penis or clitoris external genitalia of male insect genus of Beidionomyces.
- phanerocodon (fān'ērōkōdōn) *a*. [Gk. *phaneros* manifest *hodon* bell.] *Appl* detached and free-swimming zooids of hydroid colony *Opp* adelocodonic.
- phanerogam (fān'ērōgām) *n*. [Gk. *phaneros*, manifest *gamos* marriage.] A plant with conspicuous flowers anthophyte, phanogam, spermatophyte. *Opp* cryptogam.
- phanerogamous (fān'ērōg'āmōs) *a*. [Gk. *phaneros* manifest *gamos* marriage.] *Appl* plants with flowers containing stamens and stamens phanerogamic.
- phanerophyte (fān'ērōfīt) *n*. [Gk. *phaneros* manifest *phytos*, plant.] Tree or shrub with aerial dormant buds plant whose size is not appreciably less during cold or dry season.
- phaeoplankton (fē'oplāngk'tōn) *n*. [Gk. *phaeos* light; *plankton* wandering.] Surface plankton, living

- at depths to which light penetrates.
- phaesom (fē'ōsōm) *n* [Gk. *phaeos* light *some* body.] An optic organelle in certain epidermal cells of annelids.
- pharmacodynamics (fār'mākōdīnām'iks) *n*. [Gk. *pharmakon* drug; *dynamis* power.] The science of the action of drugs.
- pharyngeal (fār'ing'ēl) *a*. [Gk. *pharyngx* gullet.] *Part* pharynx *appl* artery membrane, nerve tooth tubercle, veins, etc. *appl* nephridia, in certain worms.
- pharyngobranchial (fār'ing'gōbrānj'kiāl) *a*. [Gk. *pharyngx* gullet; *branchia*, gills.] *Part* pharynx and gills *appl* certain bones of fishes.
- pharyngopalatine (fār'ing'gōpāl'itēn) *a*. [Gk. *pharyngx* gullet; *palatos* palate.] *Part* pharynx and palate *appl* arch and muscle; palatopharyngeal.
- pharynx (fār'ingks) *n*. [Gk. *pharyngx* gullet.] A musculo-membranous tube extending from under surface of skull to level of sixth cervical vertebra gullet or anterior part of alimentary canal following buccal cavity.
- phasmoda (fās'mōdā) *n*, *pl*. [Gk. *phasmos*, apparition.] Caudal papillae in Nematoda, bearing pores connecting with glandular pouch.
- phell ma (fēl'mā) *n*. [Gk. *phellos* cork.] Cork cork and non-suberised layers forming external zone of periderm phellem.
- phell d rm (fēl'ōdōrm) *n*. [Gk. *phellos* cork; *derma*, skin.] The secondary paracymbium suberous cortex of trees, formed on inner side of cork-cambium.
- phellogen (fēl'ōjēn) *n*. [Gk. *phellos* cork *gennao* to generate.] The cork-cambium of tree stems, arising as secondary meristem and giving rise to cork and phelloderm.
- phelloid (fēl'ōid) *n*. [Gk. *phellos* cork *eidos* form.] Cork-like. *n*. Non-suberised cell-layer in outer periderm.

phengophil (fēng'gōl) *n.* [Gk. *phengos* light *philos* friend.] Preferring light, *appl.* animals

phengophobia (fēng'gōfōb) *n.* [Gk. *phengos* light *phobos* fear] Shunning light, *appl.* animals.

ph nocomtour—mophant *q.v.*

phenocopy (fē'nōkōp'i) *n.* [Gk. *phainomai* to appear *F* *copies* copy from L.L. *copie* transcript.] A modification induced by environmental factors which parallels genetically produced changes.

ph nogram,—phanerogram *q.v.*

phen logical (fē'nōlō'jīkāl) *n.* [Gk. *phainomai* to appear *logos* discourse.] *Part* phenology *appl.* isolation of species owing to differences *n.* flowering or breeding season.

ph nology (fē'nōlō'jī) *n.* [Gk. *phainomai* to appear *logos* discourse.] Recording and study of periodic biotic events, as of flowering breeding migration, etc. in relation to climatic and other factors

phenomenology

phenotype (fē'nōtīp) *n.* [Gk. *phainomai* to appear *typos* image.] The characters of an organism due to the response of genotypic characters to the environment a group of individuals exhibiting the same phenotypic characters

phenotypic (fē'nōtīp'īk) *n.* [Gk. *phainomai* to show *typos* image.] *Part* phenotype *appl.* characters arising from reaction to environmental stimulus.

ph o—*see* phaco-

phe n (fēr'ōn) *n.* [Gk. *phainomai* to bear] The colloidal bearer of the active principle of an enzyme of agon, complex

phialid (fī'alīd) *n.* [Gk. *phialis* bowl *scale* form.] A flask-shaped outgrowth of spor bearing hyphae in certain fungi a stigma of metala.

phialospore (fī'alōspōr) *n.* [Gk. *phialis* bowl *spora* seed.] A spore or conidium borne at tip of a phialide

philtrum (fīl'trūm) *n.* [Gk. *philtrum* philtre.] The depression on upper lip beneath septum of nose.

phleboterism (fībē'n'īerīsm) *n.* [Gk. *phlebotis* vein *enteron* intestine.] Condition of having branches of the intestine extending into other organs, as arms or legs.

phleboedesis (fībē'dē'sīs) *n.* [Gk. *phlebotis* vein *oedema* to swell] Condition of having circulatory system cavity so distended and innervated as to diminish the coelom especially so in mollusca.

phloem (fō'ēm) *n.* [Gk. *phloios* inner bark.] Bast-tissue the soft bast of vascular bundles, consisting of sieve-tube tissue.

phloem parenchyma,—thin-walled parenchyma associated with sieve-tubes of phloem

phloem sheath,—pericycle together with inner layer of a bundle sheath where latter consists of two layers.

phloeoterma (fī'ōtēr'mā) *n.* [Gk. *phloios* inner bark *terma* boundary] Endodermis : inner most layer of cortex.

phloel (fī'ō'īk) *n.* [Gk. *phloios* inner bark] *Part* phloem *appl.* procambium that gives rise to phloem.

phototaxis (fō'tōtāk'sīs) *n.* [Gk. *phos* manifest fear *taxis* arrangement.] Avoiding reaction trial-and-error reaction.

pholadophyte (fōlād'ōfīt) *n.* [Gk. *pholos* lurking *phyton* plant.] A plant living in hollows, shunning bright light

pholidosis (fōlīd'ō'sīs) *n.* [Gk. *pholis* scale] Scale arrangement of scaled animals.

ph nati n (fōnē'shū) *n.* [Gk. *phono* sound.] Production of sounds, *f* by insects

phonoreceptor (fō'nōrē'sēptōr) *n.* [Gk. *phono* sound *L. receptor* receiver] A receptor of sound waves, as ear certain semillar

phoranthium (fōrān'thīdīm) *n*. [Gk. *phoros* to bear *anthos* flower] The receptacle of composite plants.

phoresia (fōrē'siā) *n*. [Gk. *phorēin* to bear.] The carrying of one organism by another without parasitism *appl.* insects.

phoront (fōrōnt') *n*. [Gk. *phorōn* producing *on* being] Encysted stage produced by trinitite and leading to formation of trophont in life cycle of Holotricha.

phorozooid (fōr'zō'id) *n*. [Gk. *phorōn* to bear *zōon* animal *oides* form.] Foster form of Doliolum broods, never sexually mature but set free with gonozooids attached to ventral outgrowth.

phoresoon (fōrē'sōn) *n*. [Gk. *phorōn* to bear *zōon*, animal.] An asexual organism or larval stage preceding the sexual.

phosphagen,—createine phosphate in vertebrate muscle, splitting into createine and phosphoric acid during contraction, and reformed during recovery; arginine phosphate in muscle of certain invertebrates.

phosphen (fōs'fēn) *n*. [Gk. *phos* light, *phainō* to show] A light impression on retina due to stimulus other than rays of light.

phosphorescence (fōs'fōrē'sēns) *n*. [Gk. *phosphorōs* bringing light.] The state of being luminous without sensible heat, common in marine protozoa, some copepods, and the majority of deep-sea animals bioluminescence.

phot (fō'tik) *a*. [Gk. *phos* light] *Port.* light; *appl.* zone, the surface waters penetrated by sunlight *appl.* uphotic and dysphotic zones, *appl.* photic.

photoceptor —photoreceptor *q.v.*

photochromati (fōtōkrōmāt'ik) *n*. [Gk. *phos* light *chroma*, colour] *Appl.* interval between achromatic and chromatic thresholds.

photodineals (fōtōdīnē'siā) *n*. [Gk. *phos* light *dinē* eddy] Protoplasmic streaming induced by light.

photodynamics (fōtōdīnām'iks) *n*

[Gk. *phos* light *dynamis* strength.] The study of the effects of light stimulation on plants.

photogen (fōtōjēn) *n*. [Gk. *phos* light *gēnē* producing] A light producing organ, or substance.

photogenesis,—*vs* biophotogenesis.

photogenic (fōtōjēn'ik) *a*. [Gk. *phos* light *gēnē* producing] Light producing luminescent.

photokinesis (fōtōkīnē'sis) *n*. [Gk. *phos* light *kinesis* movement.] Aggregation of organisms in response to stimulation by certain regions of the visual spectrum.

photonasty (fōtōnās'tis) *n*. [Gk. *phos* light *nastē* close pressed.] Response to diffuse light stimuli, or variations in illumination.

photopathy (fōtōp'āthi) *n*. [Gk. *phos* light *pathos* feeling] Aggregation without individual social orientation in response to light stimulus reaction to differential illumination of parts of an organism.

photoperiod (fōtōp'īrīōd) *n*. [Gk. *phos* light *perīōdos* circuit.] Duration of daily exposure to light length of day favouring optimum functioning of an organism.

photoperiodism (fōtōp'īrīōdizīm) *n*. [Gk. *phos* light *perīōdos* circuit.] Response of an organism to the relative duration of day and night.

phot phase (fōtōfāz) *n*. [Gk. *phos* light *phainō* to appear] Developmental stage during which the plant, after thermophase, shows definite requirements as to duration and intensity of light and temperature.

photophilous (fōtōf'īlūs) *a*. [Gk. *phos* light *phīlos* loving] Seeking and thriving in, strong light.

photophobic (fōtōfōb'ik) *a*. [Gk. *phos* light *phobos* fear] Not tolerating light shunning light.

photophore (fōtōfōr) *n*. [Gk. *phos* light *phorēin*, to bear] A luminous organ of certain crustaceans and fishes.

photophobic (fōtōf'īlūs) *a*. [Gk. *phos* light *phobos* fear.] Avoiding strong light.

photopic (fōt'pik) *a.* [Gk. *phōs*  
light *ops* eye.] Having or *poss*  
light adapted eye, *opp* scotopic.

photoreceptor (fō'tōrēp'tōr) n.  
[Gk. *phōs* light, *reōphos* received.] Terminal organ receiving light stimuli. photoreceptor

phosphores (fō'sfēr) n. *pl*  
(Gk. *phōs* light *sphōrō* globe.)  
Luminous organs of Crustacea.

photosynthesis (fō'tō'sī'n'thē'sis) *n*  
[Gk. *phōs* light *synthesis* putting  
together] Carbon assimilation, re-  
quiring presence of chloroplasts and  
light and consisting in synthesis of  
carbohydrates from carbon dioxide  
and water

photosynthetic (fō'tōsīn'thē'tik) a.  
[Gk. phō light synthēsis putting  
together] *App'l* nutrition by  
carbon assimilation feeding like  
a green plant.

**photosynthetic quotient**—the ratio between the volume of oxygen produced and the volume of carbon dioxide used *Opp* **respiratory quotient**

photosynthetic zone, of sea, between surface and compensation point. e.g.

phototaxis (fō'tōtāk'sis) \* [Gk.  
phōs light taxis arrangement]  
Response to stimulus of light.

*n* [Gk. *phos* Light ~~from~~ tension.]  
Sensitiveness to light condition  
of a plant or plant organ induced  
by light.

phototroph (fō totrōf'k) n. [Gk. *phōs* light + *trophē* nourishment.]  
Requiring light as source of energy in nutrition. holophytic.

**phototropism** (fōt'rōp'iz-m) *n.* [Gk. *phōs* light *tropē* turn.] The tendency shown by most plants to turn their aereal growing parts towards the greater light.

phragma (frág'má) *n* [*Gk. phragma* fence.] A spurious dissepiment or septum in endosternites or dorsal podems of thorax and abdomen in Diplopoda and insects. *Plu* phragmata.

**phragmococe** (frăg'mōkōs) *n.* [Gk.,

*Phragma* (ence lower conc.) In belemnites and other molluscs, a cone divided internally by a series of septa perforated by a siphuncle.

**phragmocytarous** (frág-moat'arús)  
a. [*Gk. phragma*, fence *bythos*,  
honey-comb cell.] Building or  
fert combs attached to supporting  
surface, as of certain wasps of  
stictocetinae.

phragmoplast ((rāg'mōplāst) *n.* [*Gk. phragma, fence; plastos, moulded.*]  
Barrel-shaped stage of spindle in mitosis.

**phragmosis** (frág'mósis) = [Gk. *phragmos* fence *some* body]  
A disc, derived from ectoplasm, in equatorial plane of cell and in which the cell plate is formed.

phragmospore (frăg'mōspōr) *n* [Gk.  
phragma fence + spora seed.] A  
septate spore

phratry (frá'trī) n [Gk. *phratēr* a  
subdivision of a tribe.] A sub-tribe  
or clan.

ph satophyte (float/oft) n. [Gk  
phra/nos tank.] Plant with very  
long roots reaching a water table.

phrenic (frén'ik) *n.* [Gr. *phren*,  
diaphragm, mind.] *Peri* or in  
region of diaphragm *appl* artery  
ganglion, nerve, plexus, vein. *Peri*  
mind.

phrenocolic (frén'kolik) *a.* (Gk. *phren* diaphragm *kolos* lower part of intestine.) *Appl.* a ligament or fold of peritoneum from left colic flexure to diaphragm.

phrenicocostal (frén'kòkòs'ál) a.  
[Gk. phrén diaphragm L. cost.  
rib] *Adj* a narrow slit or sinus  
between costal and diaphragmatic  
pleurae

phrenicocolical (frén'ikòl'ikál) a  
[Gk. *phren* diaphragm L. *col*,  
splicu.] *AAA* ligament forming  
part of peritoneum reflected over  
spleen and extending to diaphragm  
brenicolar.

**phrenicopericardial** (frén'ikōpēr't-kār'dīk) *n.* [Gk. *phrōn* dia-phragm *perí* around *kardia*, heart.] *Appl.* a ligament extending from diaphragm to pericardium.

- phthlesaner** (thi-3 8) *n* [Gk. *phthlisis* wasting *aner* male] Pupal male ant parasitised by an *Oncasma* larva.
- phthlesergate** (thi-er'gati) *n*. [Gk. *phthlisis* wasting *ergates* worker] Pupal worker ant parasitised by an *Oncasma* larva.
- phthlesogyne** (thi-3'ji'nē) *n* [Gk. *phthlisis* wasting *gyne* female] Pupal female ant parasitised by an *Oncasma* larva.
- phyad** (fi'ad) *n*. [Gk. *phya* nai *re*] An inherited form *app* occad.
- phycobillins** (fi'kōb'i'lins) *n* *plu* [Gk. *phycos* seaweed *L. billis* bile] Chromoproteins of seaweeds, as phycocyanin and phycoerythrin.
- phytochrome** (fi'kōkrōm) *n*. [Gk. *phycos* seaweed; *chromos* colour] A pigment of blue-green algae.
- phycochrysin** (fi'kōkri'sin) *n*. [Gk. *phycos* seaweed *chrysis* gold.] An accessory pigment of orange-yellow algae.
- phycocyanin** (fi'kōkē'anin) *n*. [Gk. *phycos* seaweed *hycos* dark blue.] A pigment of blue-green algae.
- phycoerythrin** (fi'kōkē'rith rin) *n*. [Gk. *phycos* seaweed; *erythros* red.] The colouring matter of red algae.
- phycology** (fi'kō'jōl) *n*. [Gk. *phycos* seaweed *logos* discourse.] That part of botany dealing with algae.
- phycophasin** (fi'kōf'āsin) *n*. [Gk. *phycos* seaweed *phasos* dusky] The pigment of brown algae.
- phycoxanthin** (fi'kōkē'n'thin) *n*. [Gk. *phycos* seaweed; *xanthos* yellow] Beff colouring matter of diatoms and brown algae.
- phyla** (fi'lā) *n*. *plu* [Gk. *phylon* tribe.] *Plu.* of phylum, *g*.
- phylacobioids** (fi'ākōbi'ōids) *n*. [Gk. *phycos*, guard *biacis* manner of living] Mutual or unilateral protective behaviour as of certain ants.
- phylactocarp** (fi'lik'tōkarp) *n*. [Gk. *phylaktikos* guarding *karpos* fruit.] A modification of hydroidium in Hydromedusae, for protection of gonophores.

- phylembryo** (fi'ēmlwōs) *n*. [Gk. *phylon* race *embryon* embryo.] Stage in development f Brachio-poda, at completion of protegulum.
- phylophobic** (fi'lēfē'bik) *n*. [Gk. *phylon* race *aphobos*, manhood.] *App* adult stage in race history.
- phylotia** (fi'lē'ti) *n*. [Gk. *phylon* race.] *Part.* a phylum or race.
- phyllade** (fi'lād) *n*. [Gk. *phyllas* foliage.] A reduced scale-like leaf.
- phyllary** (fi'lārī) *n* [Gk. *phyllos* leaf.] A bract of the involucre of Compositae.
- phyllidium** (fi'līd'ium) *n* [Gk. *phyllos* little leaf] An outgrowth from side of scolex of Cestoides bothridium.
- phyll brachia** (fi'lēbrā'ng'kiā) *n* [Gk. *phyllos* leaf *brachia* gills.] A gill consisting of trumbers of lamellae or thin plates.
- phyllocall** (fi'lōkālēn) *n* [Gk. *phyllos* leaf *kallos* : union.] A complex of substances, or hormone which stimulates growth of mesophyll.
- phylloclade** (fi'lōklād) *n*. [Gk. *phyllos* leaf *klados* sprout.] A green flattened or rounded stem (functioning as leaf as in Cactus; flattened axillary bud as in Ruacus; phyllocladium, cladode, cladophyll).
- phyilocyst** (fi'lōkist) *n* [Gk. *phyllos* leaf *kystis* bladder] The rudimentary cavity of hydrophyllum or protective medusoid.
- phyllode** (fi'lōd) *n* [Gk. *phyllos* leaf *oides* form.] Winged petiole with flattened surfaces placed later ally to stem f nctioning leaf.
- phyllody** (fi'lōdī) *n* [Gk. *phyllos* leaf; *oides* form.] Metamorphosis of an organ into a foliage leaf.
- phyllorythrin** (fi'lōrēth'ri) *n* [Gk. *phyllos* leaf *erythros* red] A red pigment derived from chlorophyll and occurring in bile of herbivorous mammals bilipupurin cholokarmatin.
- phyllogenetic** (fi'lō'jēnē'tik) *n* [Gk. *phyllos* leaf *genesis* descent.] Producing or developing leaves.



- phylloid (fīl'oid) *n.* [Gk. *phyllon* leaf *eid* form.] Leaf-like. *n.* The leaf regarded as a flattened branch, or as a telome.
- phyllomania (fī'lōmā'nīā) *n.* [Gk. *phyllon* leaf *manō* madness.] Abnormal leaf production.
- phyllome (fīl'ōm) *n.* [Gk. *phyllon* leaf.] The leaf structure of a plant as a whole.
- phyll morphosis (fīl'mōr'fōsis) *n.* [Gk. *phyllon* leaf *mōrphō* form.] Phyllody variation of leaves at different seasons.
- phyllophagous (fīl'fōg'ōs) *n.* [Gk. *phyllon* leaf *phagō* to eat.] Feeding on leaves.
- phyllophor (fīl'fōr) *n.* [Gk. *phyllon* leaf *phō* bearing.] Terminal bud or growing point of palms.
- phyllophorous (fīl'fōr'ōs) *n.* [Gk. *phyllon* leaf *phō* bearing.] Bearing or producing leaves.
- phyll pode (fīl'fōd) *n.* [Gk. *phyllon* leaf *phō* foot.] A sheathing leaf base of Isoetes.
- phyllopodium (fīl'fōd'ōdīum) *n.* [Gk. *phyllon* leaf *phō* foot.] The axis of a leaf the stem regarded as pseudo-axis formed of fused leaf bases.
- phyll podous (fīl'fōd'ōs) *n.* [Gk. *phyllon* leaf *phō* foot.] Having leaf-like swimming feet, as in Branchiopoda.
- phylloptosis (fīl'fōt'ōsis) *n.* [Gk. *phyllon* leaf *phō* falling.] The fall of the leaf.
- phyllorhiza (fīl'fōr'īk) *n.* [Gk. *phyllon* leaf *rhizō* root.] A young leaf with a root.
- phyllotrophic (fīl'fōt'fōn'īk) *n.* [Gk. *phyllon* leaf *trōphō* tube.] With insertion of leaf trace disturbing axial stele tissue *Opp* cladophrome.
- phyllosp *m.* (fīl'fōsp'm) *n.* [Gk. *phyllon* leaf *spēr* seed.] Seed borne on leaf *vs.* *n.* in pteridophytes and cycads.
- phyllospandy *u.* (fīl'fōspān'dīus) *n.* [Gk. *phyllon* leaf *phō* and *dyō* vertebra.] *Appl* vertebrae consist

- ing of hypocentrum and neural arch both contributing to hollow transverse process as in Stegocephall.
- phyllisporous (fīl'īs pōr'ōs) *n.* [Gk. *phyllon* leaf *spōr* seed.] With sporophylls like foliage leaves, as Lycopodium *cf* stachyosporous.
- phyllotactic (fīl'fōt'īk'tīk) *n.* [Gk. *phyllon* leaf *taktō* fit for arrangement.] *Part* phyllotaxis *appl* fraction of circumference of stem between successive leaves, representing the angle of their divergence.
- phyllotaxis (fīl'fōt'īk'sīk) *n.* [Gk. *phyllon* leaf *taktō* arrangement.] The arrangement of leaves on an axis or stem.
- phylloxanthin, —xanthophyll *q.s.*
- phylloroid (fīl'fōr'ōid) *n.* [Gk. *phyllon* leaf *zōō* animal *eidō* form.] A shield-shaped medusoid of protective function a hydrophyllum of Hydromedusae.
- phylobiology (fīl'fōl'ōj'ōjī) *n.* [Gk. *phylon* race *bīō* life *lōgō* discourse.] The study of reactions or behaviour of organisms in relation to their racial history.
- phyloeph *ble*, —phyloepheic, *q.s.*
- phylogenesis (fīl'fōjēn'ēsis) phylogeny (fīl'fōj'ēnī) *n.* [Gk. *phylon*, race *genēs* descent.] History of development of species or race of ontogeny.
- phylogenetic (fīl'fōjēn'ētik) *n.* [Gk. *phylon* race *genēs* descent.] *Part* race-history *appl* reproductive cells *opp* autogenetic or body cells.
- phylogerontic (fīl'fōjēn'ōn'īk) *n.* [Gk. *phylon* race *gerōn*, old man.] *Appl* decadent stage in race-history.
- phylon, —phylum, *q.s.*
- phylon anic (fīl'fōn'ēn'īk) *n.* [Gk. *phylon* race *neōn* youthful.] *Appl* youthful stage in race-history.
- phylogenapionic (fīl'fōn'ēpīōn'īk) *n.* [Gk. *phylon* race *neō* infant.] *Appl* post-embryonic stage in race history.

phylum (fīlūm) *n.* [Gk. *phylon* race or tribe] A group of animals or plants constructed on a similar general plan, a primary division in classification.

phyone (fīōn) *n.* [Gk. *phyein* to make to grow] A preputatory principle controlling growth growth hormone phylon, tetelin.

phyma (fī'm) *n.* [Gk. *phyma*, bellows.] The modified rounded base of burrowing sea-anemones.

physiologist (fī'zī'jīst) *n.* [Gk. *physis* nature *physis* physical.] From biological stand point, an upholder of theory that vital phenomena are explicable on physico-chemical basis.

physiologist (fī'zī'jīst) *n.* [Gk. *physis* nature *genesis* descent.] The development of vital activities ontogenetic in its physiological aspect physiogeny.

physiogenic (fī'zī'jīn'jīk) *n.* [Gk. *physis* nature *genes* producing] Caused by functioning of an organ or part *part* physiogenesis.

physiology (fī'zī'jī'jī) *n.* [Gk. *physis* nature *logos* discourse.] That part of biology dealing with functions and activities of organisms.

physoclistous (fī'sōk'lī'stūs) *n.* [Gk. *physis*, bladder *klistō* to close.] Having no channel connecting swim-bladder and digestive tract as in most teleosts.

physodes (fī'sōdēz) *n. plu.* [Gk. *physis* bubble.] Spherules of phloroglucin contained in plasmodium of certain Sarcodina.

physogastry (fī'sōg'ā'strī) *n.* [Gk. *physis*, to blow up *gaster* belly] Excessive fat body and enlargement of abdomen in insects.

physostomous (fī'sō'stō'nūs) *n.* [Gk. *physis*, bladder *stoma*, mouth.] Having swim-bladder and digestive tract connected throughout life by pneumatic duct, as in gnathostomes.

phytobiology (fī'tō'bī'jī'jī) *n.* [Gk. *physis*, plant *bios* life; *logos* discourse.] Plant biology the life-history of plants.

phytobiotic (fī'tō'bī'jī'jī) *n.* [Gk.

*physis* plant; *bios* life.] Living within plants *appl.* some protozoa.

phytochemistry (fī'tōkēm'ī'strī) *n.* [Gk. *physis* plant *chemos* transmutation.] The chemistry of plants.

phytochrome (fī'tōkrōm) *n. plu.* [Gk. *physis* plant *chroma*, colour] Chromoproteins of plants, as certain seaweed pigments.

phytocoenosis (fī'tō'sē'nō'sīs) *n.* [Gk. *physis* plant *koinos* common] The assemblage of plants living in particular locality.

phytogeny (fī'tōjēn'jī) *n.* [Gk. *physis* plant *genesis* descent.] Evolution, or development, of plants.

phytogeny (fī'tōjēn'jī) *n.* [Gk. *physis* plant *genesis* descent.] Plant genetics.

phytogenous (fī'tōjēn'jī) *n.* [Gk. *physis* plant *genes* generation.] Of vegetable origin produced by plants.

phytogeography (fī'tōjēn'jī'jī) *n.* [Gk. *physis* plant *ge* earth *graphō*, to write.] Study of the geographical distribution of plants.

phytography (fī'tōg'rāfī) *n.* [Gk. *physis* plant *graphō* to write.] Descriptive botany.

phytohormones (fī'tōhōr'mōnēz) *n. plu.* [Gk. *physis* plant *hormonein* to excite.] Internal secretions of plants, as urine and traumatic plant hormones.

phytoid (fī'tōid) *n.* [Gk. *physis* plant *eidos* form.] Plant like.

*n.* An individual in plant colony of zooid.

phytology (fī'tōl'jī'jī) [Gk. *physis*, plant *logos* discourse.] Botany.

phytoma (fī'tōmā) *n.* [Gk. *physis* plant.] Vegetative plant-substance.

phytom (fī'tōm) *n.* [Gk. *physis* plant.] Plants considered as an ecological unit vegetation.

phytomer (fī'tōmēr) *n.* [Gk. *physis* plant *meros* part.] A structural unit of plant a bud-bearing node.

phytomorphic (fī'tōmōr'fīk) *a.* [Gk. *phytōn* plant *morphe* form.] With plant like structure.

phyton (fī'tōn) *n.* [Gk. *phytōn* plant.] A rudimentary plant propagation unit, smallest detached part which can form another plant a *phytoner* *g.f.*

phytonomy (fītōn'ōmī) *n.* [Gk. *phytōn* plant *nomos* law.] The laws of origin and development of plants.

phytopathology (fītōpāthōl'ōjī) *n.* [Gk. *phytōn* plant *pathos* suffering *logos* discourse.] The study of abnormalities of formation and function in plants study of plant diseases.

phytophagous (fītōf'agōs) phytophilous (fītōfīl'ōs) *a.* [Gk. *phytōn* plant *phagōn* to eat *philos* loving.] Feeding on plants herbivorous.

phytophysiol'gy (fītōfīsiōl'ōjī) *n.* [Gk. *phytōn* plant *physis* nature *logos* discourse.] Plant physiology  
phytoplankton (fītōplāngk'tōn) *n.* [Gk. *phytōn* plant *plankto* wandering.] Plant plankton.

phytoplasm (fītōplāsm) *n.* [Gk. *phytōn* plant *plasma* mould.] Plant protoplasm.

phytoxis (fītō'ksī) *n.* [Gk. *phytōn* plant.] Production of disease by vegetable parasites as by fungi any disease so caused

phytonociol'gy (fītōfōsiōl'ōjī) *n.* [Gk. *phytōn* plant *L. socius* companion Gk. *logos* discourse.] The branch of botany comprising ecology chorology and genetics of plant associations.

phyt'st'ols (fītōst'ōls) *n. pl.* [Gk. *phytōn* plant *stērēs* solid *L. oleum* oil.] Plant sterol sterol from phanerogams as sitosterol  $\equiv$  gmasterol etc / mycosterols.

phytotomy (fītōtōmī) *n.* [Gk. *phytōn* plant *temnō* cutting.] The dissection of plants plant anatomy

phytotoxia (fītōtōk'sīn) *n.* [Gk. *phytōn* plant *toxikon* poison.] Any toxin originating in plants.

phytotrophic (fītōtrōf'īk) *a.* [Gk. *phytōn* plant *trophos* i nourish.] Autotrophic holophytic, *g.f.*

pia mate (pī's mā'tēr) *n.* [*L. pia mater* kind mother.] A delicate vascular membrane investing brain and spinal cord.

pigment (pīg'mēt) *n.* [*L. pingere* to paint.] Colouring matter in plants and animals.

pigment cell,—a chromatophore or chromatocyte.

pigmentation (pīg'mēntik'shān) *n.* [*L. pingere* to paint.] Disposition of colouring matter in an organ or organism.

pilea,—*pl. of pilum.*

pileat d (pīl'ēāt) *a.* [*L. pileatus* with cap.] Crested *eggs* birds.

pilocystidium (pīl'ōsītīd'īōm) *n.* [*L. pilus* cap Gk. *kystis* bag *dion* dim.] One of the cystidium-like structures on pileus of certain Basidiomycetes

pileolated (pīl'ōlīāt) *a.* [*L. pileolus* small cap.] Furnished with a small cap or cape.

pilosus (pīl'ōsūs) *n.* [*L. pilosus* small cap.] A small pileus.

pileorhiza (pīl'ēor'īzā) *n.* [*L. pilus* cap Gk. *rhiza* root.] A root covering a root-cap.

pilum (pīl'ēm) *n.* [*L. pilum* cap.] Top of head region of bird.

pileus (pīl'ēūs) *n.* [*L. pilus* cap.] Umbrella-shaped structure of mushroom, or of jelly fish.

pilidium (pīlīd'īōm) *n.* [Gk. *pilidion* small cap.] The characteristic helmet-shaped larva of Nemertea.

pili (pīl'īēr) *n.* [*L. pilus* hair *ferre* to carry.] Part of labrum of Lepidoptera.

piliferous (pīlīf'ērūs) *a.* [*L. pilus* hair *ferre* to carry.] Bearing or producing hair *appl* outermost layer of root or epidermis which gives rise to root-hairs piligerous.

pilometer (pīl'ōmētōr) *a.* [*L. pilus* hair *metron* to move.] *Appl* non-synclimated fibres innervating muscles of hair follicles.

pilose (pīl'ōs) *a.* [*L. pilus* hair.] Hairy downy

plus (pŭ's) *n.* [*L. pilus* hair]

One of slender hair-like structures covering some plants.

pinacocytes (pin'ăkô'stă) *n. plu.*

[*Gk. pinax* tablet *kytos* hollow]

The flattened plate-like cells of dermal epithelium of sponges.

placera,—prehensile claws, as of lobster; chela of insects; chelicerae of arachnids.

pineal gland or body—the epiphysis cerebri, median outgrowth from first cerebral vesicle, first tubular then branched, believed to have endocrine functions, and distally connected with the parietal organ, homologous with median eye.

pineal region,—portion of brain giving rise to pineal and parapineal organs.

pineal sac,—end vesicle of epiphysis, as in *Sphenodon*.

pineal system,—the parietal organ and associated structures, as pineal sac, stalk, and nerves, parapineal organ, epiphysis.

pin-eyed,—having stigma at mouth of tubular corolla, with shorter stamens. *Opp.* thrum-eyed.

pinna (pĭn'ă) *n.* [*L. pinna*, feather]

A leaflet of pinnate leaf; auricle or outer ear; bird's feather or wing; fish-fin.

pinna globulin,—a brown respiratory pigment containing manganese, in certain bivalves.

pinnate (pin'ăt) *a.* [*L. pinna*, feather.] Divided in a feathery manner; with lateral processes of compound leaf, having leaflets on each side of an axis or midrib.

pinnatifid (pinăt'fĭd) *a.* [*L. pinna*, feather *fĭdere*, to cleave.] *Appl.* leaves lobed half-way to midrib.

pinnatifid bat (pinăt'fĭd'băt) *a.* [*L. pinna*, feather *lobus* lobe.] With leaves pinnately lobed.

pinnation (pinăt'shĭn) *n.* [*L. pinna*, feather.] Pinnate condition.

pinnatifid (pinăt'fĭd'băt) *a.* [*L. pinna*, feather *fĭdere* divided.]

With leaves lobed three-quarters of way to midrib.

pinnatifid (pinăt'fĭd) *a.* [*L. pinna*,

feather *pes* foot.] Having lobed toes, as certain birds.

pinnatisect (pinăt'tĕkt) *a.* [*L. pinna* feather *sectus* cut.] With leaves lobed almost to base or midrib.

pinnatodentate (pinăt'ôdĕn'tăt) *a.* [*L. pinna*, feather *dens* tooth.]

Pinnate, with toothed lobes.

pinnatopectinate (pinăt'pĕk'tĭnăt) *a.* [*L. pinna* feather *pectus* comb.]

Pinnate, with pectinate lobes.

pinniform (pin'fŏrm) *a.* [*L. pinna*, feather *forma*, shape.] Feather shaped, or fin-shaped.

pinnis eras (pin'ĭnĕr'văt) *a.* [*L. pinna*, feather *erassus* sinew.] With veins disposed like parts of feather.

pinnule (pin ŭl) *n.* [*L. pinna*, stem of *pinna*, feather.] A secondary leaflet of a bipinnate or of a pinnately compound leaf in Crinoidae, one of side-branches two rows of which fringe arms.

pinocytosis (pin'ô'stô'sis) *n.* [*Gk. pinos* to drink *kytos* hollow.]

The ingestion of droplets by cells.

pinulus (pin'ŭlŭs) *n.* [*L. pinna*, small fir.] A spicule resembling a fir-tree owing to development of small spines from one ray.

piriform (pĭr'fŏrm) *a.* [*L. pirum*, pear *forma* shape.] Pear-shaped.

*appl.* muscle of gluteal region,

musculus piriformis pyriform *q. n.*

pleiocolous (plĕk'ôlŭs) *a.* [*L. pleis* fish *colere* to inhabit.] Living within fishes, as certain parasites.

pleiiform (plĕ'r'fŏrm) *a.* [*L. pleis* fish; *forma*, shape.] Shaped like fish.

pleiivorous (plĕ'r'vŏrŭs) *a.* [*L. pleis* fish *vorare* to devour.] Fish-eating.

plastriform (plĕ'r'fŏrm) *a.* [*L. plastrum* pea *forma*, shape.] Pea-shaped; *appl.* carpal bone or plastriform.

pleohamate (plĕ'hălm'ăt) *a.* [*L. plastrum*, pea *hamus* hook.] *Appl.* ligament connecting plastrum and hamate bones.

pisometacarpal (pĭ'sŏmĕtăkăr'păl) *a.* [*L. pisum*, pea *Gk. meta*, beyond *L. carpus* wrist.] *Appl.* a ligament connecting plastrum bone with fifth metacarpal.

- pistil** (pist'il) *n* [*L. pistillum* pestle.] Seed-bearing organ of flower consisting of ovary style and stigma gynoecium.
- pistillate** (pist'ilāt) *a*. [*L. pistillum* pestle.] Bearing pistils or female reproductive organs.
- pistillidium** (pist'il'idium) *n* [*L. pistillum* pestle *Gk. labrum alium*] The female sexual organ of bryophytes, pteridophytes and gymnosperms.
- pistillody** (pist'il'ōdī) *n*. [*L. pistillum* pestle *Gk. eidos* form.] The conversion of any organ of a flower into carpel.
- pistillum** (pist'il'um) *n* [*L. pistillum* pestle.] A mass of muscle in a chitinous tube in antrophore of a medusoid colony.
- pit** (pit) *n* [*A.S. pytt* pit.] A depression formed in course of cell-wall thickening in plant tissue embryonic olfactory depression.
- pit-chamber**—the cavity of bordered pit below the overarched border.
- pitfalls** (pit'ahēr) *n* [*L.L. pectus* beaker] A modification of a leaf for insect-catching purposes, as pitcher-shaped leaf of *Nepenthes*.
- pit & fda**—areas of depressions in primary cell-walls.
- pith** (pit'h) *n* [*A.S. pitha*, pith] The medulla or central region of a dicotyledonous stem etc. parenchyma.
- pit-line** *a*.—superficial grooves on dermal boxes of primitive fishes, formed by latero-accroary system.
- pit on embryo**—middle lamella of plant cell wall forming floor of pits of adjacent cells.
- pitocin**—a hormone of the posterior lobe of the pituitary gland causing contraction of uterine muscle hypophanin oxytocin.
- pitressin**—a hormone of the posterior lobe of the pituitary gland, inducing increase in blood pressure  $\beta$  hypophanin asopressin.
- pituitary** (pit'it'ēri) *n* [*L. pituita* phlegm *Gk. kytos* hollow] A glial cell is part nervous of pituitary gland.

- pituitary** (pit'it'ēri) *n* [*L. pituita* phlegm.] *Appl* a body or hypophysis of hypothalamus of brain. *n* Hypophysis, an endocrine gland, including anterior and posterior lobes and neural stalk or infundibulum.
- pituitrin** (pit'it'rīn) *n*. [*L. pituita* phlegm.] An extract from posterior pituitary lobe. *infundit*, *infundibulla*, hypophysis.
- pivot joint**—a trochoid joint, or one in which movement is limited to rotation.
- placenta** (plā'sen'tā) *n* [*L. placenta*, flat cake.] Ovula-bearing part of carpel a sporangium-bearing arm in eutherian mammals, a double vascular spongy structure formed by interlocking of foetal and maternal tissue in uterus, and in which maternal and foetal blood vessels are in close proximity allowing nutritive and respiratory exchange by osmosis.
- placental** (plā'sen'tāl) *a* [*L. placenta*, flat cake.] *Part* a placenta or similar structure *appl* mammals which develop a placenta secreted by placenta, *appl* anterior pituitary like hormone.
- placentate** (plā'sen'tāt) *a* [*L. placenta* flat cake.] *H* ring a placenta developed placentiferous, placentigerous.
- placentation** (plā'sen'tāshn) *n*. [*L. placenta* flat cake.] The manner in which seeds are attached to pericarp, or embryo to uterus formation, or structural type of placenta.
- placochromatic** (plāk'ōkrōmāt'ik) *a*. [*Gk. plax* plate *chroma*, colour] With plate-arrangement of chromatophores.
- placod** (plāk'ōd) *n* [*Gk. plax* plate *oides* form.] A localized thickening of ectoderm forming a neural primordium plate-like structure.
- placoid** (plāk'ōid) *a* [*Gk. plax* plate *oides* form.] Plate-like *appl* hard scales or dermal teeth on external surfaces of elasmobranchs *appl* a scumella, possibly reacting to

differences in air pressure in insects.

placula (plāk'ŭlā) *n.* [Gk. *plax* plate.] A flattened blastula with small segmentation cavity an embryonic stage of Urochorda a stage in Volvox.

plagioclimax (plā'jōklīm'aks) *n.* [Gk. *plagios* athwart *klimax* ladder.] Climax of a plagiosere.

plagiocser (plā'jōksēr) *n.* [Gk. *plagios* athwart *L. csero* to put in a row] Plant succession deviating from its course owing to external intervention, as by human activity a deflected sere.

plagiotropic (plā'jōtrōp'ik) *a.* [Gk. *plagios* oblique *trope* turn.] Obliquely inclined *appl.* roots and branches. *Opp.* orthotropic.

plagiotropism (plā'jōtrōp'izm) *n.* [Gk. *plagios* oblique; *trope* turn.] Tendency to incline from the vertical line to oblique or horizontal.

plagiotropous (plā'jōtrōp'ōs) *a.* [Gk. *plagios* oblique *trope* turn.] Obliquely inclined *appl.* the asymmetrical polar cap of Rhombosom.

plagula (plāk'ŭlā) *n.* [L. *plagula* curtain.] Ventral plate protecting the pedicel in epiderm.

plain muscle,—unstriped or involuntary muscle.

plakes (plāk'ŭlā) *n.* [Gk. *plakous* fat cake.] Plate-like early stage in formation of a coenobium.

planas,—*planas*, *f. s.*

planidium (plānid'ium) *n.* [Gk. *planos* wandering *idion* alone.] Active migratory larva of certain insects.

planiform (plān'fōrm) *a.* [L. *planus* level *forma*, shape.] With nearly flat surface *appl.* certain articulation surfaces.

planikton (plāng'kton) *n.* [Gk. *planos* wandering] The marine or fresh-water plants and animals drifting with the surrounding water including animals with weak locomotory power.

planoblast (plān'ōblast) *n.* [Gk. *planos* wandering; *blastos* bud.] A free-swimming hydroid individual.

planocyt (plān'ōst) *n.* [Gk. *planos* wandering *kytos* hollow] A wandering cell a planospore swarm cell of certain fungi.

planogamete (plān'ōgāmēt) *n.* [Gk. *planos* wandering *gameles* spouse.] A ciliated motile protoplast [some algae motile gamet] certain fungi microzoospore zoogamete.

planont (plān'ōnt) *n.* [Gk. *planos* wandering *on* being] The initial amoebula-stage of Neosporidia a swarm-spore produced in thick walled or resting sporangia of certain Phycomycetes.

planosom (plān'ōsōm) *n.* [Gk. *planos* wandering *sōma*, body] A supernumerary chromosome due to non-disjunction of mates in meiosis.

planospor (plān'ōspōr) *n.* [Gk. *planos* wandering *spora* seed.] A motile spore zoospore *Opp.* aplanospore.

planta (plān'til) *n.* [L. *planta*, sole of foot.] The sole of foot first tarsal joint of insects *pex* of proleg.

plantar (plān'tār) *a.* [L. *planta* sole of foot.] *Part* sole of foot *appl.* arteries, ligaments, muscles, nerves, veins etc.

plantigrade (plān'tigrād) *a.* [L. *planta*, sole of foot *gradus* step.] Walking with whole sole of foot touching the ground.

plantula (plān'tŭlā) *n.* [L. *plantula* small sole.] A pulvillus-like adhesive pad on tarsal joints of some insects.

planula (plān'ŭlā) *n.* [L. *planus* flat.] The ovoid young free-swimming larva of coelenterates.

planum (plān'um) *n.* [L. *planus* flat.] A plane or area *appl.* certain cranial bone surfaces.

plaque (plāk) *n.* [F. *plaque* plate.] Area cleared by a phage; bacterial growth *tache* vierge.

plasma (plāz'mā) *n.* [Gk. *plasma* form.] The liquid thorax of body fluid; protoplasm generally.

- plasmagene (plāx mājēn) = [Gk. *plasma* form *gene* descent.] A heritable protein unit or molecule in cytoplasm, influencing or later acting with other plasmagene cytoplasmic determiner cytogene.
- plasmalemma (plāx'māldēmā) = [Gk. *plasma*, form *lemma* skin.] The thin cytoplasmic membrane covering ectoplasm or adjoining cell wall vitelline membrane
- plasmatic (plāzmāt'ik) = [Gk. *plasma* form.] *Peri* plasma protoplasmic.
- plasmatogamy—plasmogamy *q.v.*
- plasmatoönkosis (plāx'mātdōng'kōzē) = [Gk. *plasma* form *orgānē* bulk.] A thickened storage organ or tuboid structure of zoospore antrum, as in Peronosporales
- plasmatoparous (plāx'mātdōp'ārūs) = [Gk. *plasma* form *L. parer* to beget.] Developing a mycelium directly upon germination instead of zoospores, as grape mildew and other Plasmopora.
- plasmocyte (plāx'mōsh) = [Gk. *plasma*, form *hyles* hollow.] A leucocyte.
- plasmoma (plāx'mōdē mā) = [Gk. *plasma* form *asma*, bond.] Cytoplasmic intercellular bridge plasmodesm, plasmodesmad
- plasmoidal (plāzmō'diāl) = [Gk. *plasma* form *oidēs* form.] *Peri* a plasmodium
- plasmodiocarp (plāzmō'diōkār'p) = [Gk. *plasma* form *stade* form *karpos* fruit.] A modification of plasmodium in some alime moulds.
- plasmoditroph blast, — syntrophoblast, *q.v.*
- plasmodium (plāzmō'diūm) = [Gk. *plasma* form *stade* form.] A collection of amorphous masses without nuclear fusion a multinucleate mass of protoplasts without cell-wall of Myxomycetes syncytium
- plasmogamy (plāzmōg'āmē) = [Gk. *plasma*, form *gamos* marriage.] In Protozoa, fusion of several individuals into multinucleate mass fusion of cytoplasmic substance without nuclear fusion
- plasmolysis (plāzmōl'izē) = [Gk. *plasma* form *lysis* looking.] The withdrawal of water from plant cell, causing contraction of cell-walls and of protoplasm.
- plasmomites (plāx'mōmēz) = *plā*. [Gk. *plasma* form; *mites* thread.] Minute fibrillae forming with plasmosomes the intergranular substance of a cell.
- plasmaon (plāx'mōn) = [Gk. *plasma* form *on* being.] Hypothetical system of cytoplasmic hereditary units, *apē* gene system in the chromosome.
- plasmomena (plāzmōnē'mā) = [Gk. *plasma* form *menē* thread.] Protoplasmic thread in connection with plastids *Pls* plasmomenata.
- plasmophore (plāx'mōfōr) = [Gk. *plasma* form *phore* carrying.] Telophragma Z-disc, *q.v.*
- plasmosome (plāx'mōsēm) = [Gk. *plasma*, form *soma*, body.] The true nucleolus of karyosome a minute cytoplasmic granule.
- plasmotomy (plāzmōt'omē) = [Gk. *plasma* form *tome* cutting.] Division of plasmodium by cleavage into multinucleate parts.
- plasma (plāx'mā) = [Gk. *plasma*, form *soma*, body.] A hypothetical unit, *q.v.*
- plasmaon (plāx'mōn) = [Gk. *plasma*, to form.] The formative substance which may give rise to cellular elements; undifferentiated protoplasm.
- plast (plāx'tē) = [Gk. *plasto* formed.] Formative *apē* substances used in forming or building up tissues or organs; *apē* force which gives matter definite form.
- plastid (plāx'tid) = [Gk. *plasto*, formed *stade* form.] A cell-body other than nucleus or centrosome.
- plastidogen organ,—the axial organ of echinodermata.
- plastidom (plāx'tidōm) = [Gk. *plasto* formed *stade* form *stade* chamber.] In cell the plastids as whole cytoplasmic inclusions which give rise to plastids
- plastidule (plāx'tidulē) = [Gk. *plasto* formed *stade* form *stade*.] A hypothetical unit, *q.v.*

plastin (plás'tín) *n.* [Gk. *plasis* formed.] A substance found in reticulum of cells.

plastochoria, —mitochondria, *g.s.*

plastochron (plás'tókrón) *n.* [Gk. *plastes* formed *chronos* time.]

Time interval between successive stages in development as between appearance of successive primordia in spiral systems of phyllotaxis.

plastocont, —chondriocont, *g.s.*

plastodynamia (plás'tóðiná'miá) *n.* [Gk. *plastes* formed *dynamis* power.] Plastic or formative force.

plastogamy (plástóg'ámi) *n.* [Gk. *plastes* formed; *gamos* marriage.] Union of distinct unicellular individuals with fusion of cytoplasm but not of nuclei.

plastogenes (plás'tójená) *n. pl.* [Gk. *plastes* formed *genesis* to produce.] Cytoplasmic factors, controlled by or interacting with nucleus, which determine differentiation of plastids.

plastokont, —chondriocont, *g.s.*

plastomere (plás'tómér) *n.* [Gk. *plastes* formed *meros* part.] Chondriomere; the chondriosome content of sperm cytomere.

plastosome, —chondriosome *g.s.*

plastral (plás'trál) *n.* [F *plastron* breast plate.] Part. plastron.

plastro (plás'trón) *n.* [F *plastron* breast-plate.] Ventral bony shield of tortoises and turtles; other corresponding structure film i gas, or layer of gas bubbles retained by hairs, covering epicuticle of aquatic insects.

plate (plát) *n.* [F *plat* Gk. *platys* flat.] A flat, broad, plate-like structure or surface lamina, scale, disc, etc.

platybasal (plát'ibás'álk) *n.* [Gk. *platys* flat *basis* base.] Appl the primitive chondrocranium with wide hypophyseal fenestra of troleban.

platydactyl (plát'ídák'tíl) *n.* [Gk. *platys* flat *dactylus* finger.] With flattened-out fingers and toes, as certain tailless amphibians.

platybleri (plát'íbr'érík) [Gk. *platys* flat *hieros* sacred.] Having sacral index above 100 of dolichobleric

platysma (plást'r'má) *n.* [Gk. *platysma*, flat piece.] Broad sheet of muscle beneath superficial fascia of neck.

platyspermic (plát'ispér'mík) *a.* [Gk. *platys* flat *sperma*, seed.] With seed bilaterally symmetrical.

plectochyma (plékténg'kímá) *n.* [Gk. *plektos* twisted *chyma*, infusion.] A tissue of cell filaments of tubular cells in algae and fungi.

plectonemic (pléktóném'ík) *n.* [Gk. *plektos* twisted *menos* thread.] Having orthospirals interlocked at each twist, as of sister chromatids.

plectophridia (pléktónéfríd'ia) *n. pl.* [Gk. *plektos* twisted *nephros* kidney.] Nephridia of diffuse type formed of networks of fine secretory tubules lying on body wall and septa of certain oligochaetes plectonephria, nephridia.

pleiotropism (pléi'otrópizm) *n.* [Gk. *pleio* shock *trope* turn.] A movement of an organ, resulting from redistribution of particles in protoplasm in response to change in velocity.

pleiochaetium (plé'óká'xítm) *n.* [Gk. *pleion*, more *chaeta* division.] Axis of cymose inflorescence bearing more than two lateral branches.

pleiocotyl (plé'ókót'il) *n.* [Gk. *pleion* more *kotyle* cup.] A plant having more than two cotyledons.

pleiocotyl dony (plé'ókót'il'dóni) *n.* [Gk. *pleion*, more *kotyledon*, cup-shaped hollow.] The condition of having more than two seed-leaves or cotyledons.

pleiocyclic (plé'ókik'ík) *n.* [Gk. *pleion* more; *kyllos* circle.] Living through more than one cycle of activity as perennial plant.

pleiomerous (pléóm'érús) *n.* [Gk. *pleion* more *meros* part.] Having more than normal number of parts, as of petals or sepals.



pleiomery (plōm'ēn) *n* [Gk. *pleion* more *more* part.] Condition of having more than the normal number of parts as in a whorl

pleiomorphous, pleomorphous.

pleiopetal *na* (plō'pēt'ālō) *n*. [Gk. *pleion* more *petalon* leaf.] Having more than the normal number of petals having double flowers.

pleiophyllous (plō'fīl'ūs) *n* [Gk. *pleion* more *phylon* leaf.] Having more than normal number of leaves or leaflets.

pleiotaxy (plō'tāk'sī) *n*. [Gk. *pleion* more *axis* arrangement.] A multiplication of whorls, as in double flowers pleiotaxis.

pleiotropic (plō'trōp'ik) *n*. [Gk. *pleion* more *trope* turn.] Influencing more than one character *appl* effects of a gene *part* pleiotropy

pleiotropy (plō'tr'ōpī) *n* [Gk. *pleion* more *trope* turn.] Multiple effects of single genetic factor pleiotropism

Pleistocene (plō'stōsēn) *n*. [Gk. *pleisto* most *haimos* recent.] *Part* o *appl* glacial and post glacial epoch following the Tertiary period and merging into the Pliocene. *n* The great Ice Age with four glacial and three inter glacial phases

pleochroic (plō'krō'ik) *n*. [Gk. *pleon* more *chromos* colour.] With various colours.

pleochromatic (plō'krōmāt'ik) *n*. [Gk. *pleon* more *chroma*, colour.] Exhibiting different colours under different environmental or physiological conditions.

pleogamy (plō'gāmī) *n* [Gk. *pleon* more *gamos* marriage.] Maturation, therefore pollination at different times as of flowers of one plant.

pleometrosi (plō'mē'trōsī) *n*. [Gk. *pleon* more *metros* mother.] Colony foundation by more than one female as in some social Hymenoptera *appl* monometrosi

pleomorphic (plō'mōr'fik) *n* [Gk. *pleon* more *morphe* form.] Having two or more distinct forms occurring in one life cycle having several shapes polymorphous, pleomorphous pleiomorphous.

pleon (plō'n) *n*. [Gk. *plein*, to swim.] The abdominal region of Crustacea.

pleopod (plō'pōd) *n* [Gk. *plein* to swim *pous* foot.] An abdominal appendage or swimming leg of Crustacea.

plerergate (plēr'ēgāt) *n* [Gk. *pleres* full *ergater* worker.] A replicate worker ant having gaster distended with food.

plerocercoid (plēr'rōsēr'kōid) *n* [Gk. *pleres* full *kerkos* tail *cercer* form.] The elongated worm-like larval form of certain cestodes in second intermediate host.

plerocystoid (plēr'rōsēt'ōid) *n*. [Gk. *pleres* full *kystis* gird *cyst* form.] A metacystode, or sexless encysted stage of a cestoid worm also plerocercoid.

plet me (plēr'mē) *n* [Gk. *pleroma*, filling.] The core or central part of an apical meristem.

pletoti (plēr'ōtī) *n*. [Gk. *pleron* to fill.] Completely filling *pace appl* oospore filling oocystum *Off* apl oot

pleist biotic (plē'stōtō'ik) *n*. [Gk. *pleistos* near *bios* living.] Living in close proximity *appl* colonies of ants of different species or of building contiguous nests, *appl* ants and termites.

pleist metacarpal (plē'stōmētākār'pāl) *n* [Gk. *pleisto* near *metakarpal* after *karpus* wrist.] *Appl* condition of retaining proximal elements of metacarpals as in many Cervidae *appl* telemetacarpal.

pleist morph (plē'stōmōr'f) *n*. [Gk. *pleistos* near *morphe* form.] Having similar form

pleistotype (plē'stōtīp) *n* [Gk. *pleistos* near *typos* image.] A species related to a genotype found in a different region or geological formation hypotype *g.s*

pleura (ploor'ä) *n.* [Gk. *pleura* side] A serous membrane lining thoracic cavity and investing lung *plu.* of pleuron, *g.s.*

pleural (ploor'äl) *a.* [Gk. *pleura* side.] *Part.* a pleura or pleuron, as pleural ganglia *appl.* costal plates of cheloman carapace.

pleuralia (ploor'äl) *n. plu.* [Gk. *pleura*, side.] Defensive spicules scattered over general body surface.

pleuranthos (ploor'än thös) [Gk. *pleura*, side *anthos* flower] Having inflorescences on lateral axes, not on main axis.

pleurapophysis (ploor'äpöf'is) *n.* [Gk. *pleura*, side; *epi* from *physis* growth.] A lateral vertebral process or true rib.

pleurethmoid (ploor'eth moid) *n.* [Gk. *pleura*, side *ethmos* sieve *ethra* form.] The compound ectethmoid and prefrontal of some fishes.

pleurite (ploor'it) *n.* [Gk. *pleura*, side.] A sclerite of the pleuron.

pleurobranchia (ploor'öbräng'ksh) *n. plu.* [Gk. *pleura*, side *branchia*, gills.] Pleurobranchs, or gills springing from lateral walls of thorax of certain Arthropoda.

pleurocarpic (ploor'ökar'pik) *a.* [Gk. *pleura*, side *karpos* fruit.] *Appl.* mooses with fructification on lateral branches pleurocarpous.

pleuroccipital, — exoccipital *g.s.*

pleurocentrum (ploor'ösen'trüm) *n.* [Gk. *pleura*, side *L. centrum* centre.] A lateral element of centrum of many fishes and fossil amphibians.

pleurocerebral (ploor'öser'bräl) *a.* [Gk. *pleura*, side *L. cerebrum* brain.] *Part.* pleural and cerebral ganglia, in mollusca.

pleurocystidium (ploor'öset'id'idüm) *n.* [Gk. *pleura* side *hystis* bag *idion* stem.] A cystidium hymenium of surface of lamella of chelocystidium.

pleurodont (ploor'ödon't) *a.* [Gk. *pleura*, side; *odon* tooth.] Having teeth fixed by sides to lateral surface of jaw ridge, as in some lizards.

pleuron (ploor'on) *n.* [Gk. *pleuron* side] One of the external lateral pieces of body segments of arthropods a lateral extension of crustacean shells. *Plu.* pleura.

pl uropedal (ploor'öp'däl) *a.* [Gk. *pleuron*, side *L. pes* foot.] *Part.* pleural and pedal ganglia of mollusca.

pleuroperitone *m.* (ploor'öp'r'itön'üm) *n.* [Gk. *pleura*, side *peritonion* to stretch round.] Pleura and peritoneum combined, body lining membrane of animals without diaphragm.

pl uropodi *m.* (ploor'öp'ö'diüm) *n.* [Gk. *pleura*, side *pes* foot.] A lateral glandular process of abdomen of some insect embryos.

pl uresphenoid, — sphenolateral *g.s.*

pleurospore (ploor'öspör) *n.* [Gk. *pleura*, side *spora* seed.] Spore formed on sides of basidium.

pleurostemon (ploor'ös'tön) *n.* [Gk. *pleura* side *stemon* bone.] Lateral process of sternum in young birds, afterwards costal process.

pl urotribe (ploor'ötrib) *a.* [Gk. *pleura*, side *tribos* to rub.] *Appl.* flowers whose anthers and stigma are so placed as to rub sides of insects entering — device for securing cross-pollination.

pleurovisceral (ploor'övis'eräl) *a.* [Gk. *pleura*, side *L. viscera*, intestines.] *Part.* pleural and visceral ganglia, of mollusca.

pl unto (ploor'öton) *a.* [Gk. *pleura* side ready for sailing] Free-floating plants.

plexiform (pläk'efförm) *a.* [*L. plexus* interwoven; *forma* shape.] Entangled or complicated like a network, *appl.* layers of retina; *appl.* peripheral layer of grey matter of cerebral cortex.

plexiform gland, — the axial organ of echinodermis.

plexus (pläk'süs) *n.* [*L. plexus* interwoven.] A network of interlacing vessels, nerves, or fibres.

plica (plikä) *n.* [*L. plicare* to fold.] A fold of skin, membrane, or lamella.

plicate (pŭ'kāt) *n* [L. *plicare* to fold.] Folded like a fan, as a leaf folded or ridged.

pliticform (plī'sŏrm) *n* [L. *plicare* to fold *forma* shape.] Resembling a fold disposed in folds.

Pliocene (plī'sēn) *n* [Gk. *pleion* more *kenos* recent.] The latest epoch of the Tertiary period.

pliotophyte (plō'tŏfīt) *n* [Gk. *phlōtos* floating *phytōn* plant.] A plant adapted for floating.

ploughshare bone — pygostyle *g.s.* vomer *g.s.*

pluma (ploom'a) *n* [L. *pluma* feather] A contour feather of birds.

plumate (ploom'āt) *n* [L. *pluma*, feather] Plumelike.

plume (ploom) *n* [L. *pluma* feather] A feather or feather like structure.

plumicome (ploom'ikŏm) *n* [L. *pluma* feather *coma* hair] A spicula with plume-like tufts.

plumicorn (ploom'ikŏrn) *n* [L. *pluma* feather *cornu* horn.] Horn-like tuft of feathers on bird's head.

plumigerous (ploom'ij'ērs) *n* [L. *pluma* feather *gerere* to carry] Feathered.

plumiped (ploom'ipēd) *n* [L. *pluma* feather *pes* foot.] A bird with feathered feet.

plumose (ploom'ōs) *n* [L. *pluma* feather] Feathery having feathers feather like *appl.*

type arrangement of skeletal fibre in sponges *appl.* feathers without hamuli on barbules, *appl.* pennaceous.

plumal (ploom'al) *n* [L. *plumula* small feather] An adult down feather succeeding preplumula a plumule *g.s.*

plumula (ploom'ulā) *n* [L. *pluma* small feather] *Part* a plumule.

plumulate (ploom'ulāt) *n* [L. *plumula* small feather] Downy with downy covering plumulaceous.

plumule (ploom'ul) *n* [L. *plumula* small feather] A primary bud on epicotyl. *bach* der lops primary axis 1 a stem androconia of numerous butterflies. *plumula* *g.s.*

plurixial (ploor'ik'siāl) *n* [L. *plus* more *axis* axle.] Having flowers developed on secondary shoots.

plurilocular (ploor'lik'ulār) *n* [L. *plus* more *loculus* little place.] Having two or more loculi multi-locular.

plurinuclear (ploor'isŭ'klār) *n* [L. *plus* more *nucleus* kernel.] Having several nuclei.

pluripartite (ploor'ipār'tit) *n* [L. *plus* more *partitus* divided.] With many lobes or portions.

pluripolar (ploor'ipŏ'lār) *n* [L. *plus* more *polus* axis-end.] Having several poles *appl.* ganglion cells, etc. multipolar.

pluriseptate (ploor'isēp'tāt) *n* [L. *plus* more *septum* partition] With multiple septa.

pluriserial (ploor'isē'rīāl) *n* [L. *plus* more *series* row] Arranged in two or more rows.

plurivalent (ploor'ivālēnt, ploor'ivālēt) *n* [L. *plus* more *valere* to be worth] *Appl.* a chromosome with more than one chromosome.

plateal (ploor'tāl) *n* [L. *plateus* shed] *Part* a pluteus.

pluteus (ploor'tūs) *n* [L. *plateus* shed.] The free-swimming larva of echinoderms and ophiuroidea.

pneumathod (nū'miāthōd, pō-) *n* [Gk. *pneuma* breath *hodos* way] An aeral or respiratory root.

pneumatic (nū'miā'tik, pō-) *n* [Gk. *pneuma* air] *Appl.* bones penetrated by canals connected with respiratory system, in birds *appl.* duct between swim-bladder and alimentary tract in physostomous fishes.

pneumaticity (nū'miā'tis'it pō-) *n* [Gk. *pneuma* air] State of having air cavities as bones of flying birds.

pneumatised (nū'miā'tizēd pō-) *n* [Gk. *pneuma* air] Furnished with air cavities.

pneumatocyst (nū'miā'tisēt, pō-) *n* [Gk. *pneuma* air *kystis* bladder] The air-bladder or swim-bladder of fishes air cavity used as float.

pneumatophore (nū'mātōfōr po-) *n.* [Gk. *pneuma*, air; *pherein* to bear.] The air-exc or float of siphonophores; an air-bladder of marsh- or shore-plants; aerating outgrowth in certain ferns; an aerating root.

pneumatopyle (nū'mātōpīl, po-) *n.* [Gk. *pneuma*, air; *pyle* gate.] A pore of pneumatophore opening above to exterior in certain Siphonophora.

pneumogastric (nū'mōgās'trik, po-) *n.* [Gk. *pneuma*, air; *gaster* stomach.] *Appl* tenth cranial or vagus nerve supplying pharynx, larynx, heart, lungs and viscera.

pneumostome (nū'mōstōm, po-) *n.* [Gk. *pneuma*, breath; *stoma* mouth.] The pulmonary aperture through which air passes to and from respiratory mantle cavity in terrestrial gastropoda.

pneumotaxis (nū'mōtīk'sis, po-) *n.* [Gk. *pneuma*, air; *taxis* arrangement.] Reaction to stimulation by carbon dioxide in solution; pneumotaxis.

pod (pōd) *n.* [M.E. *pod* bag.] A superior one-celled, one- or many-seeded fruit of two valves legume & husk.

podal (pō'dāl) *n.* [Gk. *podus* foot.] *Part.* feet; *podal part.* para-podia, *appl.* membrane.

podicon (pō'dīkōn) *n.* [Gk. *podus* foot.] The podicon or slender middle part of abdomen of Hymenoptera, uniting propodeon and metapodeon.

podotiliform (pōdō'tīlōrm) *n.* [Gk. *podus* foot; *L. forma*, shape.] Resembling a podetium.

podetium (pōdō'shīrm) *n.* [Gk. *podus* foot.] A stalk-like elevation outgrowth of thallus bearing pothecium in certain lichens.

podex (pō'dēks) *n.* [*L. podex* rump.] The region about the anus pygidium, *q.v.*

podical (pōd'īkāl) *n.* [*L. podex* rump.] 1 anal region; *adanal appl.* a pair of small hard plates or paraprocts beside anus of arthropoda.

podite (pōd'it) *n.* [Gk. *podus* foot.] A crustacean walking leg.

podium (pō'dīrm) *n.* [Gk. *podus* foot.] A foot or footlike structure stem axis.

podobranchiae (pōdō'brāng'kiē) *n.* *pl.* [Gk. *podus* foot; *branchia*, gills.] Podobranchs or foot gills springing from coxopodites of thoracic appendages of certain Arthropoda.

podoccephalous (pōdō'kēf'ālūs, -ēf-) *n.* [Gk. *podus* foot; *kephale* head.] Having head of flowers on long stalk.

podoconus (pōdō'kō'nūs) *n.* [Gk. *podus* foot; *konos* cone.] A conical mass of endoplasm connecting the central capsule with the disc of Sarcodina.

podocyst (pōdō'sīt) *n.* [Gk. *podus* foot; *kyrtis* bladder.] A pedal sinus or caudal vesicle in certain Casteropoda.

pododerm (pōdō'dērm) *n.* [Gk. *podus* foot; *derma*, skin.] Dermal layer of a hoof, within horny layer.

podogynium (pōdō'gīn'īrm) *n.* [Gk. *podus* foot; *gynē* female.] A stipe supporting the gynoeceum basogynium.

pod mere (pōdō'mēr) *n.* [Gk. *podus* foot; *meros* part.] A limb segment of arthropoda.

pod phthalmite (pōdō'fthāl'mīt) *n.* [Gk. *podus* foot; *ophthalmos* eye.] In crustaceans, eyestalk segment farthest from head.

podotheca (pōdō'thē'kāl) *n.* [Gk. *podus* foot; *thēke* box.] A foot covering as of birds or reptiles pupal leg sheath.

podzol (pōdzōl) *n.* [*Russ. pod* under; *zola*, ash.] Gray forest soil soil type of cold temperate regions, and formed on heath lands and under coniferous forest.

podonion (pōgō'nōn) *n.* [Gk. *podonion*, little beard.] Most prominent point of chin as represented on mandible.

podilocyt (pōd'īlōst) *n.* [Gk. *podillos* various; *kyrtis* cell.] A distorted form of erythrocyte present in certain pathological conditions.

**poikilogeny** (pōik'īlōg'ōn) *n* [Gk. *poikilos* various *gēnē* generation.] Intraspecific variation in duration of embryological processes due to environmental factors.

**poikilothermal** (pōik'īlōthēr'māl) *a*. [Gk. *poikilos* various *thermē* heat.] *Opp* cold-blooded animals or those whose temperature varies with that of surrounding medium *poikilo-*thermous *cf* homeiothermal.

**point mutation**,—a mutation proper heritable change occurring at a single gene locus *genovariation*, *micromutation*, *transgenation*.

**poiste cell**,—*eurycyst*, *q.s*

**polar** (pō'lār) *a*. [Gk. *polos* pivot.] In region of end of an axis *st*, *o* *peri* a pole.

**polar body**,—one of two cells divided off from ovum during maturation before germ nuclei fuse *polocyte*.

**polar capitel** *s*,—of spores containing coiled extrusible filaments, in *Cnidospordia*.

**polar cartilag**,—posterior portion of trabecula, or independent cartilage in that region.

**polar granule**,—centromere *q.s*

**polar nuclei**,—nuclei at each end of angiosperm embryo which later form secondary *coleus*.

**polar plates**,—two narrow ciliated areas produced in transverse plane part of equilibrium apparatus of certain *Coelenterata*.

**polar rays**,—axial rays *opp* spindle fibres.

**polar rings**,—two ring-shaped cytoplasmic masses near ovum poles formed after union of germ-nuclei.

**polarity** (pō'lār'itē) *n* [Gk. *polos* pivot.] The tendency of plants to develop from the poles roots downwards stems upwards the tendency of an ovum to place itself with axis corresponding to that of mother.

**pole-plates**,—end-plates or achromatic masses at spindle poles in protozoan mitosis.

**Pollan vesicles** [*G S Poll* Italian naturalist]. Interradial vesicles

pening into ring vessel of ambulacral system of most *Asteroides* and *Holothuroidea*.

**pollioplasm** (pōl'īōplāsm) *n*. [Gk. *pollos* gray *plasma* form.] Spongioplasm granular protoplasm.

**pollikanthic** (pōl'ākan'thik) *a*. [Gk. *pollakis* many times *anther* flower.] Having several flowering periods. *Opp* hapaxanthic.

**pollen** (pōl'en) *n* [L. *pollen* fine flour.] The male fertilizing element of seed-plants.

**pollen analysis**,—qualitative and quantitative determination of the occurrence of pollen in deposits, as in peat palynology *q.s*

**pollen-chamber**,—pat formed at apex of nucellus below micropyle.

**pollen profile**,—the vertical distribution of pollen grains in a deposit.

**pollen sac**,—loculus of anther microsporangium of seed-plants.

**pollen spectrum**,—the relative numerical distribution or percentage of pollen grains of different species in sample of deposit.

**pollen tube**,—a tubular process developed from pollen grains after attachment to stigma, represents male gametophyte.

**pollex** (pōl'ēks) *n*. [L. *pollex* thumb.] The thumb, or innermost digit of the normal five in anterior limb.

**pollinarium** (pōl'īnār'ium) *n* [L. *pollen* fine flour.] The pollinifer with its cardile and adhesive disc.

**pollination** (pōl'īnā'shūn) *n*. [L. *pollen* fine flour.] Fertilization in flowers transference of pollen from anther to stigma, or from stigma to ovule.

**pollinifer** *n* drop, — mucilaginous drop exuded from micropyl and which detains pollen grains in gymnosperms.

**polliniferous** (pōl'īnif'ērūs) *a* [L. *pollen* fine flour *ferre* to carry.] Pollen-bearing adapted for transferring pollen polliniferous.

**pollinium** (pōl'īn'ium) *n* [L. *pollen* fine flour.] An agglutinated pollen mass in orchids and other plants.

- pollinodi** m (pól'tnō díŭm) n [L. *pollen*, fine flour; Gk. *kodas* way] An antheridium of certain algae and fungi.
- pollinoid** (pól'tnōid) n. [L. *pollen*, fine flour; Gk. *oides* form.] A male gamete or spermatum.
- polocytes** (pól'tsitis) n. *pól* [Gk. *polos* axis *kylos* hollow] Polar bodies, *g.s.*
- polster** (pól'stēr) n. [Ger. *Polster* pad.] A low compact perennial or cushion plant.
- polyadelphous** (pól'tidēl fīs) n. [Gk. *poly* many *adelphos* brother] Having stamens united by filaments into more than two bundles.
- polyandrous** (pól'tān drōs) n. [Gk. *poly* many; *aner* male.] Having twenty or more stamens mating with more than one male.
- polyandry** (pól'tān drī) n. [Gk. *poly* many *aner* male.] Condition of female coexisting with several males.
- polyarch** (pól'tārk) n. [Gk. *poly* many *arche* beginning] Having many protoxylem bundles *appl.* multipolar spindle in higher plants.
- polyaxon** (pól'tik'sōn) n. [Gk. *poly* many *axis* axis.] Type of spicule laid down along numerous axes.
- polyblast** (pól'tiblast) n. [Gk. *poly* many *blastos* bud.] A histocyte these macrophage.
- polycarp** (pól'tikārp) n. [Gk. *poly* many *karpos* fruit.] A gonad of some acidians on inner surface of mantle.
- polycarpellary** (pól'tikārp'pēllārī) n. [Gk. *poly* many *karpos* fruit] With compound gynoeceum.
- polycarpi** (pól'tikārp'pēk) **polycarpous** (pól'tikārp'pōs) n. [Gk. *poly* many *karpos* fruit.] With numerous carpels producing seed season after season, *appl.* perennials.
- polycaryo-**—**polykaryo-**
- polycentri** (pól'tēn'trīk) n. [Gk. *poly* many *kentron*, centre.] With several centromeres, *appl.* chromosome. n. A polycentric chromosome.
- polycarcous** (pól'tēr'kūs) n. [Gk.

- poly* many *karhos* tail.] *Appl.* bladderworms developing several cysts, each with head.
- polychasium** (pól'tikā sīŭm) n. [Gk. *poly* many *chasis* division.] A cymose branch system when more than two branches arise about the same point.
- polychromasy** -le (pól'tikrō mīsl) n. [Gk. *poly* many *chroma* colour] Multiple and differential tinting with one staining mixture.
- polychromati** (pól'tikrōmāt'ik) n. [Gk. *poly* many *chroma*, colour] With several colours, as pigment areas *appl.* two forms of erythrocytes with well-defined chromatin.
- polychromatocyte** (pól'tikrō mītōsīt) [Gk. *poly* many, *chroma*, colour *kylos* hollow] A blood cell developed from normoblast and which becomes normocyte or mature erythrocyte *polychromatophil* erythrocyte.
- polychromatophil** (pól'tikrō mītōsīt) n. [Gk. *poly* many; *chroma*, colour *philes* to love.] Having staining reaction characterised by varying colours *appl.* erythroblasts with small haemoglobin content.
- polycotyledon** (pól'tikōtēl's'dōn) n. [Gk. *poly* many *hutyledon*, hollow vessel.] A plant with more than two seed leaves.
- polycotyledonary** (pól'tikōtēl's'dōnārī) n. [Gk. *poly* many *hutyledon*, hollow vessel.] Having placenta in many divisions.
- polycotyledonous** (pól'tikōtēl's'dōnūs) n. [Gk. *poly* many *hutyledon*, hollow vessel.] Having more than two cotyledons or seed lobes, as *fi* embryo.
- polycotyledony** (pól'tikōtēl's'dōnī) n. [Gk. *poly* many; *hutyledon* hollow vessel.] A great increase in number of cotyledons.
- polycrotism** (pól'tik rōtīm) n. [Gk. *poly* many *kratos* beating] Condition of having several secondary elevations in pulse curve.
- polycyclic** (pól'tik'kīk) n. [Gk. *poly* many *kyklos* circle.] Having many whorls or ring structures.

**polycystid** (pól'há'stíd) *n* [Gk. *poly* many *kytis* bladder] Septate partitioned off.

**polydactyl** (pól'dák'tíl) *n* [Gk. *poly* many *daktylos* finger] Condition of having an excessive number of fingers or toes *polydactylism*.

**polydesmic** (pólik'tés mík -dés) *n* *Appl* cyclomorph scales made up of monodesmic scales of synpolydesmic deuteropolydesmic.

**polyembryony** (pól'tém'bróní) *n* [Gk. *poly* many *embryon* foetus.] Formation of several embryos in one ovule instance of a zygote giving rise to more than one embryo *g* identical twins, offspring of armadillos, certain insects, etc.

**polyenergic** (pól'tén'érij) *n* [Gk. *poly* many *energias* active.] *Appl* nuclei with more than one centriole

**polygamous** (pólg'ámbús) *n* [Gk. *poly* many *gamos* marriage] Bearing male female and hermaphrodite flowers coexisting with more than one mate.

**polygamy** (pólg'ámí) *n* [Gk. *poly* many *gamos* marriage.] Condition of having staminate pistillate and hermaphrodite flowers on same individual condition of having more than one mate at time.

**polygons** (pólj'én) *n* [Gk. *poly* many *gonos* descent.] A gene or minor mutant controlling quantitative characters buffering gene *Obj* oligogenes

**polygenesis** (pólj'én'ésí) *n* [Gk. *poly* many *gonos* descent] Derivation from more than one source origin of new type *1* more than one place or time

**polygenetic** (pól'jén'et'ík) *n* [Gk. *poly* many *gonos* descent] Derived from more than one source *polyphyetic*

**polygen** (pól'jén'ík) *n* [Gk. *poly* many *gonos* producing] Controlled by number of genes *part* polygenes polygenetic *g*

**polygerm** (pól'tjém) *n* [Gk. *poly* many *L. germes* bud] An isolated group of modular

**polygonautic** (pólg'ón'ú'tík) *n* [Gk. *poly* many *gonos* to beget.] Rearing more than one brood in a season.

**polygynocelial** (pól'jín'és'ál) *n* [Gk. *poly* many *gyn* woman; *celos* house.] Having multiple fruits formed by united gynocelia.

**polygynous** (pólg'ín'ús) *n* [Gk. *poly* many *gyn* female.] Consorting with more than one female at a time with many styles.

**polykalic** (pól'tkár'ík) *n* [Gk. *poly* many *karyon* nut.] Multinucleate.

**polykaryocyte** (pól'tkár'í'et) *n* [Gk. *poly* many *karyon* nut *kytos* hollow] A multinucleate cell of bone marrow

**polykaryon** (pól'tkár'í'ón) *n* [Gk. *poly* many *karyon* nut.] A polyenergic nucleus a nucleus with more than one centriole.

**polykont** (pól'tkón) *n* [Gk. *poly* many *kontas* pole.] Multiflagellate.

**polylecithal** (pól'tés'thál) *n* [Gk. *poly* many *lekithos* yolk.] Containing relatively much yolk, as centrolecithal eggs of megalecithal mesolecithal meolecithal

**polymastigote** (pól'imás'tí'gót) *n* [Gk. *poly* many *mastis* whip.] Having flagella arranged in a tuft.

**polymastism** (pól'imás'tím) *n* [Gk. *poly* many *masto* breast.] Occurrence of more than normal number of mammae *polymastia*.

**polymasy** (pól'imég'ásí) *n* [Gk. *poly* many *masyas* greatly] Occurrence of more than two sizes of sperm in one animal.

**polymeniscous** (pól'imén'ísk'ús) *n* [Gk. *poly* many *meniskos* small moon.] Having many lenses, as compound eye.

**polymerus** (pól'im'é'ús) *n* [Gk. *poly* many *meros* part.] Consisting of many parts or members.

**polymorph** (pól'imór'f) *n* [Gk. *poly* many *morphe* form.] A polymorphonuclear leucocyte

**polymorphic**,—**polymorphous** *g* **polymorphism** (pól'imór'fizm) *n* [Gk. *poly* many *morphe* form.] Occurrence of different forms of

individuals in same species occur  
rence of different forms, or different  
forms of organs, in same individual  
at different periods of life.

**polymorphonuclear** (pŏl'mŏr'fŏnŭ  
klĕŭ) *a.* [Gk. *poly* many *morphe*  
form, *L. nucleus* kernel.] *Appl.*  
amoeboid leucocytes with multi-  
partite nuclei connected by fine  
threads of chromatin.

**polymorphous** (pŏl'mŏr'fŭs) *a.* [Gk.  
*poly* many *morphe* form.] Show  
ing marked degree of variation in  
body form, during the life history  
or within the species; *part.* or con-  
taining variously shaped units  
*appl.* layer the inner cell-lamina of  
cerebral cortex polymorphic,  
pleomorphic of monomorphic.

**polyaucleate** (pŏl'īnŭklĕŭ) *a.* [Gk.  
*poly* many; *L. nucleus* kernel.]  
Polykaryc multinucleate.

**polyoestrous** (pŏl'tē'strŭs) [Gk.  
*poly* many *oistros* gadfly] Hav-  
ing a succession of oestrous periods  
in one sexual season of men-  
oestrous.

**polyp** (pŏl'p) *n.* [*L. polypos* polyp.]  
A simple Actinozoan, or separate  
zooid of a colony

**polyparium** (pŏl'pā'rĭŭm) *n.* [*L.*  
*polypos* polyp.] The common base  
and connecting tissue of colony  
of polype; polypary

**polypetalous** (pŏl'tēr'ālŭs) *a.* [Gk.  
*poly* many *petalon* leaf.] Having  
separate, free, or distinct petals.

**polyphagous** (pŏl'tŭgŭs) *a.* [Gk.  
*poly* many *phagŭs*, to eat.]  
Eating various kinds of food  
of insects, using many different food  
plants of monophagous oligo-  
phagous, stenophagous of Sporo-  
zoa, passing different phases of life-  
history in different cells.

**polyphyletic** (pŏl'tifĕl'ĭk) [Gk.  
*poly* many *phylon* race.] Con-  
vergent, as *appl.* group com-  
bining characteristics of more than  
one ancestral type through inde-  
pendent acquisition having origin  
from several lines of descent  
of oligophyletic, monophyletic.

**polyphyllous** (pŏl'tifĭl'ŭs) *a.* [Gk.

*poly* many *phyllon* leaf] Many-  
leaved.

**polyphyodont** (pŏl'tifŏdŏnt) *a.* [Gk.  
*polyphyes* manifold *odous* tooth.]  
Having many successive sets of teeth.

**polypid** (pŏl'tĭpĭd) *n.* [*L. polypos*  
polyp] An individual or person of  
zooid colony polypite.

**polyplastic** (pŏl'tĭplā'stĭk) *a.* [Gk.  
*poly* many *plastēs* formed.]  
Capable of assuming many forms.

**polyploid** (pŏl'tĭplŏid) *a.* [Gk. *poly*  
many *plŏs* onefold; *eidos*  
form.] With a reduplication of the  
chromosome number as triploid,  
tetraploid, etc. having three four  
etc. times the normal haploid or  
gametic number exhibiting poly-  
ploidy *n.* An organism with more  
than two chromosome sets.

**polypneusti** (pŏl'tnŭ'stĭk, pŏt-) *a.*  
[Gk. *poly* many *pneis* to breathe.]  
*Appl.* lateral lobes bearing multiple  
spiracle pores, in certain insects.

**polypod** (pŏl'tĭpŏd) *a.* [Gk. *poly*  
many *pod* foot.] Furnished  
with many feet or legs polypodous.

**polypoid** (pŏl'tĭpŏid) *a.* [*L. polypos*  
polyp Gk. *eidos* form] Polyp-like.

**polyprotodont** (pŏl'tprŏ'tŏdŏnt) *a.*  
[Gk. *poly* many *protos* first;  
*odous* tooth.] With four or five  
incisors on each side of upper jaw  
and one or two fewer on lower

**polyrhizal** (pŏl'tŭr'zāl) *a.* [Gk. *poly*  
many *rhizē* root.] With many  
roots or rootlets polyrhizous.

**polysepal us** (pŏl'tŭs'ep'ālŭs) *a.* [Gk.  
*poly* many *sepalos* sepal.] Hav-  
ing free or distinct sepals.

**polyalphonic** (pŏl'tāfŏn'ĭk) *a.* [Gk.  
*poly* many *strophon* tube.] *Appl.*  
a hydromedusa stem consisting of  
several hydrocanli bound together

**polysoni** (pŏl'tŭs'ŏn'ĭk) *a.* [Gk.  
*poly* many *sones*, body] Having  
one or more chromosomes, not the  
entire set, in the polyploid state  
*part.* a number of homologous genes.

**polysoniti** (pŏl'tŭs'ŏn'ĭk) *a.* [Gk.  
*poly* many *sones*, body *temnein*,  
to cut.] Having many body  
segments formed from fusion of  
primitive body segments.



**polyaomy** (pól'áō mī) *n.* [Gk. *poly* many *aōmē* body] The poly aomic condition.

**polyaspermous** (pól'ispēr'mās) *a.* [Gk. *poly* many *spērma* seed.] Having many seeds.

**polyasparmy** (pól'ispēr'mī) *n.* [Gk. *poly* many *spērma* seed.] Entry of several sperms into one ovum.

**polyaspondyli** (pól'ispōn dīlī) *n.* [Gk. *poly* many *spōndylō* vertebra.] Condition of having vertebral parts multiple where myotome has been lost of diplospondyli

**polyasporocystid** (pól'ispōrōkīstīd) *n.* [Gk. *poly* many *spōrō* seed *kystis* bladder *oides* form.] Appl. oocyst of Sporozoa when more than four sporocysts are present.

**polyasporous** (pól'ispō'rūs) *a.* [Gk. *poly* many *spōrō* seed.] Many seeded many-spored.

**polystachyous** (pól'istāk'kīūs) *a.* [Gk. *poly* many *stachy* ear of corn.] With numerous spikes.

**polystelio** (pól'istē'īk) *a.* [Gk. *poly* many *stēle* post.] With several steles.

**polystely** (pól'istē'īl) *n.* [Gk. *poly* many *stēle* post.] Arrangement of axial vascular tissue in several steles each containing more than one vascular bundle

**polystemoneous** (pól'istēm onūs) *a.* [Gk. *poly* many *stēmōn* warp.] Having stamens more than double the number of petals or sepals.

**polystichous** (pól'istīkūs) *a.* [Gk. *poly* many *stichōs* row.] A ranged in numerous rows or series.

**polystomatous** (pól'istōm ātūs) *a.* [Gk. *poly* many *stōmō* mouth.] Having many pores mouths openings or suckers many mouthed as *Discomedusae* and *ponges*.

**polystomium** (pól'istō mīōm) *n.* [Gk. *poly* many *stōmō* mouth.] A suctorial mouth of *Discomedusae*

**polystylar** (pól'istī'lār) *n.* [Gk. *poly* many *stylōs* pillar.] Many-styled

**polysymmetrical** (pól'isīmētr'īkāl) *a.* [Gk. *poly* many *symmetrōs* due proportion.] Divisible through

several planes into bilaterally symmetrical portions.

**polytene** (pól'tēn) *a.* [Gk. *poly* many *tēnēs*, band.] Appl. chromosome resulting from close association of products of paired multiple chromosomes.

**polythalamous** (pól'thāl āmūs) *a.* [Gk. *poly* many *thalamōs* chamber.] Aggregate or collective, as appl. fruits appl. galls appl. shells made up of many chambers formed successively

**polythelia** (pól'thē'liā) *n.* [Gk. *poly* many *thēlē* nipple.] The occurrence of supernumerary nipples.

**polytocous** (pól'tōkūs) *a.* [Gk. *poly* many *tōkōs* offspring.] Prolific producing several young at a birth fruiting repeatedly cario-carpous.

**polytomous** (pól'tōmūs) *a.* [Gk. *poly* many *tōmō* cutting.] Having more than two secondary branches.

**polytopic** (pól'tōp'īk) *a.* [Gk. *poly* many *tōpōs* place.] Occurring or originating in several places.

**polytrichous** (pól'trīkūs) *a.* [Gk. *poly* many *trīkhōs* hair.] Having the body covered with an even coat of cilia, as certain infusorians.

**polytrochal** (pól'trōkāl) *a.* [Gk. *poly* many *trōkhōs* wheel.] Having several circles of cilia between mouth and posterior end as in certain annulates *polytrochous*.

**polytrophic** (pól'trōf'īk) *a.* [Gk. *poly* many *trōphōs* nourishment.] Appl. ovariole in which nutritive cells are enclosed = oocyte follicles; nourished by more than one organism or substance obtaining food from many sources.

**polytypic** (pól'tīp'īk) *a.* [Gk. *poly* many *tīpōs* type.] Having or *port* many types appl. species having geographical subspecies appl. genus having several species appl. monotypic.

**polyvoltine** (pól'tvō'līn) *a.* [Gk. *poly* many *vōltēs*, times.] Producing several broods in one season, appl. certain silk worms.

polyxylic (pŏl'īk) *a.* [Gk. *poly* many *xylos* wood.] Having many xylem strands and several concentric vascular rings *appl.* stem, as in Cycadales.

polyzarium (pŏl'zā rīŏm) *n.* [Gk. *polyz*, many; *zōon* animal.] The skeletal system of a polyzoon colony; the colony itself.

polyzoic (pŏl'zō'ik) *a.* [Gk. *polyz* many *zōon*, animal.] *Appl.* a colony of many zooids *appl.* spore containing many sporozoites.

polyzooid (pŏl'zō'oid) *n.* [Gk. *polyz* many *zōon* animal *oides* form.] An individual in a polyzoon colony.

poma (pŏm) *n.* [L. *pomum*, apple.] An inferior indehiscent, two or more celled fleshy fruit.

pompette (pŏmp'et) *n.* [It. *pompette*, little pump.] An organ forcing spermatozoa into penis, as in *Phlebotomus*; sperm pump.

pons Adam, — prominent ridge of thyroid cartilage in front of neck, more pronounced in males.

porogen (pŏn'ŏjēn) *n.* [Gk. *poros* to *gennao*, to produce.] Waste matter produced by excretion *fatigue* poison.

pons (pŏns) *n.* [L. *pons* bridge.] A structure connecting two parts.

pons Varoli (pŏns vā'rō'li) [L. *pons* bridge *C. Varoli* or *Varolius* Italian anatomist.] Broad band of white fibres connecting cerebrum, cerebellum and medulla oblongata and including the posterior part of grey matter.

portal, pontic, pontile, pontine — *pert.* pons or the pons Varoli.

posticulus (pŏst'ik'ŭlŭs) *n.* [L. *posticulus* small bridge.] A vertical ridge on auricular cartilage *propens*.

popliteal (pŏp'līt'ēl pŏp'līt'ēl) *a.* [L. *poplite* ham.] *Pert.* region behind and above knee-joint *appl.* artery glands, nerve, vein, muscle, etc.

portellanous (pŏr'tēl'ānŭs) *a.* [F

*portellane* from It. *portellana* Venus shell.] Resembling porcelain, white and opaque *appl.* calcareous shells as of Foraminifera, certain Mollusca, etc.

pore (pŏr) *n.* [Gk. *poros* channel.] A minute opening or interstice, as of the skin, sieve-plates stomata, etc.

pore-organ, — structure surrounding canal for excretion of mucus through pores, in desmids.

pore-rhomb, — canals grouped half rhombs on each of two adjoining plates of calyx in Cystodes.

poricidal (pŏr'is'idal) *a.* [Gk. *poros* channel *L. caedere* to cut.] Destroying by valves or pores as fruit of poppy stamens of lily.

poriferous (pŏr'if'ēŭs) *a.* [Gk. *poros* channel *L. ferre* to bear.] Furrowed with numerous openings.

poriform (pŏr'if'ŏrm) *a.* [Gk. *poros* channel *L. forme* shape.] Resembling pore.

porocyte (pŏr'ōc'it) *n.* [Gk. *poros* channel *kytos* hollow.] A perforated cell of Porifera.

porogam (pŏr'ŏg'ām) *n.* [Gk. *poros* channel *gamos* marriage.] A plant whose pollen-tube enters ovule by micropyle, *opp.* chalazogam.

porogamy (pŏr'ŏg'ām) *n.* [Gk. *poros* channel *gamos* marriage.] Entrance of a pollen-tube into ovule by micropyle to secure fertilization, *opp.* apogamy.

poroids (pŏr'ōidz) *n. plur.* [Gk. *poros* channel *oides* shape.] Minute depressions in theca of dinoflagellates and diatoms.

porophyllous (pŏr'ŏf'ill'ŭs) *a.* [Gk. *poros* channel *phyllon* leaf.] Having or *appl.* leaves with numerous transparent spots.

porphyrins (pŏr'f'ir'ins) *n. plur.* [Gk. *porphyra* purple.] Certain coloured organic compounds which combine with metals to form respiratory pigments and catalysts.

porphyrophore (pŏr'f'ir'ŏf'ŏr) *n.* [Gk. *porphyra* purple *phorō*, to bear.] A reddish-purple pigment-bearing cell.

porphyropain (pôr'firôp'ain) *n*. [Gk. *porphyrus* purple *opsis* sight.] Visual purple a retinal pigment in fishes.

porrect (pôr'ekt') *a*. [L. *porrectus* stretched out.] Extended outwards.

porta (pôr'tâ) *n*. [L. *porta*, gate.] A gate-like structure as transverse fissure of liver hilus.

portal (pôr'tâl) *a*. [L. *porta*, gate.] *Appl* a system of veins draining alimentary canal spleen, and pancreas to the liver also a system to kidney in lower vertebrates.

portio (pôr'tiô pôr'abîô) *n*. [L. *portio* portion.] A part or portion of a nerve blood-vessel, etc.

position-effect, — effect due to relative position of a gene or genes within the chromosome.

positive tropism, — tendency to move towards source of stimulus.

postabdomen (pôs'tâbdô'men) *n*. [L. *post* after *abdomen* belly] In scorpions metathorax or posterior narrowest five segments of abdomen anal tubercle in spiders

postanal (pôs'tâ nâ) *a*. [L. *post* after *anus* vent.] Situated behind anus.

postantennal (pôs'tântên'âl) *a*. [L. *post* after *antenna* sail-yard.] Situated behind antennae *appl* sensory organ in Arthropoda and Collembola organ of Tomosvary

postaxial (pôs'tâk'siâl) *a*. [L. *post* after *axis* axis.] On posterior side of axis as on fibular side of leg

postbacillary (pôs'tbâsî'lârî) *a*. [L. *post* after *bacillum* small staff.] Having cells behind sensory zone of retinal cells *appl* ocellus inverted eye as of spiders. *Opp* prebacillary

postbranchial (pôs'tbrânj'kiâl) *a*. [L. *post* after *branchiae* gills.] Behind gill-clefts *appl* a structure arising in pharynx.

postcardinal (pôs'tkâr'dînâl) *a*. [L. *post* after Gk. *kardia*, heart.] Behind region of heart *appl* a dorsal vein.

postcava (pôs'tkâ vâ) *n*. [L. *post* after *cava* hollow] The inferior or posterior vena cava of vertebrates above fishes postcaval vein.

postcentral (pôs'tsên'trâl) *a*. [L. *post* after *centrum* centre.] Behind central region *appl* a cerebral sulcus, part of intraparietal sulcus.

postcentrum (pôs'tsên'trûm) *n*. [L. *post* after *centrum*, centre.] The posterior part of vertebral centrum of certain vertebrates.

postcerebral (pôs'tsêr'êbrâl) *a*. [L. *post* after *cerebrum*, brain.] Posterior to the brain *appl* cephalic salivary glands, as in Hymenoptera.

postclavicle (pôs'tklâv'ikl) *n*. [L. *post* after *clavicula* small key] A membrane bone occurring in shoulder girdle of some higher ganoids and teleosts also post clethrum.

postclitellian (pôs'tklî'têl'îân) *a*. [L. *post* after *clitellum* pack-saddle.] Situated behind clitellum.

postclival (pôs'tklîv'âl) *a*. [L. *post* after *clivus* hill.] *Appl* fissure behind clivus of cerebellum.

postclypeus (pôs'tklîp'êus) *n*. [L. *post* after *clypeus* shield.] The posterior part of clypeus of an insect *cf* anteclypeus.

postcornual (pôs'tkôr'nûâl) *a*. [L. *post* after *cornu* horn.] *Appl* glands situated behind horns as in chamois.

postcranial (pôs'tkrâ nîâl) *a*. [L. *post* after *cranium* skull.] *Appl* area of posterior head region.

postdirotic (pôs'tdikrô'tik) *a*. [L. *post* after Gk. *di* twice *krôstos* (beat.) *Appl* a secondary wave of a pulse or that succeeding the dirotic.

postembryonic (pôs'têmbêl'ôn'ik) *a*. [L. *post* after Gk. *embryon* foetus.] *Post* the age or stages succeeding the embryonic.

posterior (pôs'têr'îô) *a*. [L. *posterior* latter.] Situated behind or dorsally behind the axis superior or next the axis.

**posterolateral** (pōs'tērōlāt'ērāl) *a.* [*L. posterus* following; *latus* side.] Placed posteriorly and towards the side *appl.* arteries.

**posteromedial** (pōs'tērōmēd'īāl) *a.* [*L. posterus* following; *medius* middle] Placed posteriorly and medially *appl.* arteries.

**postflagellate** (pōstflāj'ētāl) *a.* [*L. post* after; *flagellum* lash.] *Appl.* forms of trypanosome intermediate between flagellates and cyst.

**postfrons** (pōstfrōns) *n.* [*L. post*, after *frons*, forehead.] Portion of frons posterior to antemary base line in insects.

**postfrontal** (pōstfrōn'tāl) *a.* [*L. post* after *frons*, forehead.] *Appl.* bone occurring behind orbit of some vertebrates.

**postfurca** (pōstfūr'kāl) *n.* [*L. post* after *furca*, fork.] A posterior sternal furca of an insect.

**postganglionic** (pōstgāng'glōn'ik) *a.* [*L. post* after *Gk. ganglion* tumour] *Appl.* autonomic nerve-fibres issuing from ganglia; of preganglionic.

**postgena** (pōstjēn'ā) *n.* [*L. post* after *gena*, cheek.] Posterior portion of insect gena.

**postglenoid** (pōstglēn'oid) [*L. post* after *Gk. glen* socket] Behind the glenoid fossa *appl.* a process or tubercle.

**posthepatic** (pōst'hēpāt'ik) *a.* [*L. post* after *hepar* liver] *Appl.* latter part of alimentary canal, that from liver to ood.

**postheterokinesis** (pōsthēt'ērōkīnēs'is) *n.* [*L. post* after *Gk. heteros* other; *kinesis* movement.] Case of incisions in which the sex-chromosome passes undivided to one pole in the second spermatocyte division.

**posticus** (pōst'kūs, pōs'tikūs) [*L. posticus* behind.] On outer or posterior surface extreme postical.

**postischii** *m.* (pōstis'kīūm) *n.* [*L. post* after *Gk. ischion* hip.] A lateral process on hinder side of ischium of some reptiles.

**postlabrum** (pōstlābrūm) [*L.*

*post* after *labrum* lip] Posterior portion of insect labrum, where differentiated.

**postminimus** (pōstmin'imū) *n.* [*L. post* after *minimus* smallest.] A rudimentary additional digit or curving occasionally in amphibians and mammals.

**postmitotic** (pōstmitō'tik) *n.* [*L. post* after *Gk. mitos* thread.] A cell with individual life originating in mitosis and ending at death of intermitotic.

**postneural** (pōstnē'rāl) *a.* [*L. post* after *Gk. neuron* nerve.] Pygal, *appl.* plates of chelonian carapace.

**postnodular** (pōstnōd'ulār) *a.* [*L. post* after *nodus* small knot.] *Appl.* cerebellar fissure between nodule and uvula.

**postnotum** (pōstnō'tūm) *n.* [*L. post*, after *Gk. noton* back.] Post scutellum.

**postoral** (pōst'ōrāl) *a.* [*L. post* after mouth.] Behind the mouth *appl.* appendages of arthropoda. *Opp.* preoral.

**postorbital** (pōstōr'bītāl) *a.* [*L. post* after *orbita* circle] Behind the orbit *appl.* bone forming part of posterior wall of orbit.

**postotic** (pōstō'tik) *a.* [*L. post* after *Gk. otis* ear] Behind the ear *appl.* a system of nerves.

**postparietal** (pōst'pār'ētāl) *a.* [*L. post* after *paries* wall.] *Appl.* paired bones sometimes occurring between parietal and interparietal.

**postpatagium** (pōst'pātāj'ūm) *n.* [*L. post* after *patagium* border] In birds, small fold of skin extending between upper arm and trunk.

**postpermanent** (pōstpēr'mānēt) *a.* [*L. post* after *permanens* remaining] *Appl.* traces of dentition succeeding the permanent.

**postphragma** (pōstfrāj'mā) *n.* [*L. post* after *phragma*, fence.] A phragma developed in relation with postnotum in insects.

**postpituitary** (pōst pītū hārī) [*L. post* after *pituita* phlegm.] *Peri.* or secreted by posterior lobe of the hypophysis or pituitary gland.

postpubic (pōstpū'bik) *n* [L. *post* after *pubes* adult.] At posterior end of pubis *appl* processes of pubis parallel to ischium.

postpubis (pōstpū'bis) *n* [L. *post* after *pubes* adult.] A ventral process or bone of pelvic girdle in some *Isauroidea*.

postpyramidal (pōstpīrām'idāl) *n* [L. *post* after *pyramis* pyramid.] Behind the pyramid *appl* a corollary fissure.

postretinal (pōstrēt'ināl) *n* [L. *post* after *retina*, from *retina* net.] Situated behind the retina *appl* nerve fibres connecting peripeticon and inner ends of ommatidia.

postscutellum (pōstskūtēl'ūm) *n* [L. *post* after *scutellum* small shield.] A projection under mesoscutellar lobe of insects, the base of mesophragma sclerite behind scutellum postnotum pseudonotum.

postspinal (pōstspī'nōid) *n* [L. *post* after Gk. *spina* wedge *noto* form.] The posterior part of sphenoid.

poststernellum (pōst'stērnēl'ūm) *n* [L. *post* after *sternum* breast bone.] Most posterior portion of an insect sternite.

poststernit (pōststēr'nīt) *n* [L. *post* after *sternum* breast bone.] Posterior sternal sclerite of insects sternellum.

post-temporal (pōst tē'm porāl) *n* [L. *post* after *tempus*, temples.] Behind temporal bone *appl* bone and fossa.

post-trematic (pōst-trēmāt'ik) *n* [L. *post* after Gk. *tremas* hole.] Post-branchial *appl* nerves running in posterior wall of first gill cleft to pharynx.

postxygopophyal (pōst'xīgōpōf'ial) *n* [L. *post* after Gk. *xygus* yoke *apo* from *physis* growth.] An articular process on posterior face of neural arch for articulation with following vertebra.

potamoplankt *n* (pōt āmōplāngk tōn) *n* [Gk. *potamo* ver

*planktos* wandering.] The plankton of streams and their backwaters. potential (pōtēn'āhl) *n* [L. *potens* powerful.] Latent, as *appl* characteristics.

pouch (pouch) *n* [O.F. *poch* bag.] A bag-like structure a sac or bladder as pharyngeal pouches, marsupial pouch a pod.

Foupart's ligament [F. *Foupart* French anatomist]. The inguinal ligament.

powder down feathers, — those which do not develop beyond the early stage and in which the tips of barbs disintegrate into powder.

pra — *also* pre-  
praeabdomen (prē ābdō mēn) *n* [L. *prae* before *abdomen* belly.] The anterior broader part of abdomen of arthropods mesosoma.

praeauricular (prē ārk'ūlār) *n* [L. *prae* before *auricula* small ear.] *Appl* a sulcus at anterior part of auricular surface of hip-bone.

praeaxial (prēāk'siāl) *n* [L. *prae* before *axis* axle.] On anterior border or surface.

prae centrum (prēān'trām) *n* [L. *prae* before *centrum* centre.] The anterior part of the vertebral centrum of certain lower vertebrates.

praececes (prēkō sēs) *n* *pl* [L. *prae* before *coquo* to cook.] Newly hatched birds able to take care of themselves *cf* altricia.

prae costal (prēkō'stāl) *n* [L. *prae* before *costa* rib.] *Appl* short spurs on basal portion of hind wing of Lepidoptera.

prae coxa (prēkōk sā) *n* [L. *prae* before *coxa* hip.] S coxa.

prae crural (prēkrōor'āl) *n* [L. *prae* before *crus* leg.] On anterior side of leg or thigh.

prae cuneus (prēkū ēds) *n* [L. *prae* before *cuneus* wedge.] The medial surface of parietal lobe or quadrate lobe of cerebrum.

pra m rae (prēmōrē) *n* [L. *prae* minus bitten off.] With irregular and abrupt termination as if end were bitten off *prae m rae*.

**praecipital** (prē'ēdīp'itāl) *n.* [*L. prae* before *capit* back of head.] *Appl.* an indentation or notch in front of posterior end of cerebral hemispheres *pro-occipital*.

**praecoral** (prē'ōrāl) *n.* [*L. prae* before *os* mouth.] *Part* part of body of a larva anterior to mouth *appl.* process, loop lobe, ciliated rings *preoral*.

**praepubic** (prēp'ēb'ik) *n.* [*L. prae* before *pubes* mature.] On anterior part of pubis *appl.* elongated processes of pubes of certain vertebrates.

**praeputial** (prēp'ūsh'īl) *n.* [*L. praeputium* foreskin.] *Part* the praepuce *appl.* glands near preputial.

**praeputium** (prēp'ūsh'īm) *n.* [*L. praeputium*, foreskin.] Foreskin part of integument of penis which leaves surface at neck and is folded upon itself *prepuce* fold of labia minora over glans clitoris.

**praescutum** (prēsk'ūt'ūm) *n.* [*L. prae* before *scutum*, shield.] The anterior part of sternum of an insect thoracic ring

**praesphenoid** (prēsf'ēn'oid) *n.* [*L. prae* before; *Gk. sphēn*, wedge.] The anterior part of sphenoid.

**praesternal** (prēst'ēr'nāl) *n.* [*L. prae* before *sternum* breast-bone.] *Appl.* jugular notch, on superior border of sternum.

**praetarsus** (prētār's'ūs) *n.* [*L. prae* before; *tarus* ankle.] Terminal outgrowth on tarsus of insects and spiders.

**pre-**—also *prae-*

**preadaptati** *n.* (prē'ādāptēsh'ūn) *n.* [*L. prae* before *ad* to *aptari* to fit.] Constitutional predisposition of an organism to fit into different environment adaptation of mutant to particular conditions.

**pre-anal** (prē'nāl) *n.* [*L. prae* before *L. anus* anus.] Anterior to anus *appl.* commissures *Nematoda*.

**pre-axial** (prē'āk's'ial) *n.* [*L. prae* before; *axis* axle.] In front of the axis.

**probacillary** (prē'bād'ār'ī) *n.* [*L. prae* before *bacillum* small staff.] Having nuclei distal to sensory zone of retinal cells *appl.* ocellus, converted or erect eye, as of spiders.

*Opp.* postbacillary

**probasillare** (prē'bās'ilārē) *n.* [*L. prae* before *basis* base.] Transverse sclerite between mentum of gnathochilarium and first body sternite, in certain Diplopoda.

**precartilage** (prē'kār'tilēj) *n.* [*L. prae* before *cartilago* gristle.] Type of cartilage preceding formation of other kinds, or persisting as in fin rays of certain fishes.

**precava** (prēkāl'vā) *n.* [*L. prae* before *cavus* hollow.] The superior or anterior vena cava *precaval* vein.

**precentral** (prēstē'ntrāl) *n.* [*L. prae* before *centrum*, centre.] Anteriorly to centre *appl.* sulcus parallel to central sulcus of cerebrum.

**prochordal** (prēkōr'dāl) *n.* [*L. prae* before *Gk. chorda* cord.] Anteriorly to notochord or spinal cord *appl.* part of base of skull.

**precipitins**, —specific antibodies in immune serum which form precipitates with their respective antigens *f.* bacterio-haematolacto-mycophyto-zooprecipitin.

**preclavia** (prēklāv'ia) *n.* [*L. prae* before *clavis* key.] An element of pectoral girdle.

**preclimax** (prēklīm'aks) *n.* [*L. prae* before *Gk. klimax* ladder.] The plant community immediately preceding the climax community; *cf.* proclimax.

**precilival** (prēkil'vāl) *n.* [*L. prae* before *cilivus* hill.] *Appl.* fissure in front of clivus of cerebellum.

**precoracoid** (prēkōr'āk'oid) *n.* [*L. prae* before *Gk. korax* crow.] An anterior ventral bone of pectoral girdle.

**precoxa**, —subcoxa, *q.v.*

**precystic** (prēst'ītik) *n.* [*L. prae* before *Gk. kystis* bladder.] *Appl.* small forms appearing before the encystment stage in some protozoa.

**predelineation** (prē dēlīnē shūn) *n.* [*L. prae* before *de* down *line* line.] Formation and individualisation of various physiological molecules in definite areas and substances of undeveloped egg—theory of germinal localisation.

**predentary** (prēdēn'tārī) *n.* [*L. prae* before *dens* tooth.] A bone at tip of jaw of many dinosaurs.

**predentia** (prēdēn'tin) *n.* [*L. prae* before *dens* tooth.] Substance of fibrils or Koorf's fibres which changes into dentin.

**predigital** (prēdij'tālī) *n.* [*L. prae* before *digitus* finger] A primary wing-quill connected with distal phalanx of second digit.

**pre-epistom** (prēp'istōm) *n.* [*L. prae* before *Gk* *epi* upon *stoma* mouth.] A plate covering basal portion of epistome of certain Arachnoidea.

**pr f mar** (prēf'mar) *n.* [*L. prae* before *femur* thigh] Second trochanter as in walking legs of Pycnogonida.

**p flagellate** (prēflaj'elāt) *n.* [*L. prae* before *flagellum* lash] *Appl* forms of trypanosomes later mediate between cyst and elongate flagellates.

**prefloration** (prē flor'ashūn) *n.* [*L. prae* before *fla* flower] The form and arrangement of floral leaves in the flower bud ptyxis and activation.

**prefoliation** (prē fōlī'ashūn) *n.* [*L. prae* before *folium* leaf] The form and arrangement of foliage leaves in the bud ptyxis and veneration.

**preformation theory**—theory according to which it was supposed that each ovum of an animal contained a miniature adult, and that nourishment only was required to develop it into the perfect form.

**prefrontal** (prēfrūn'tāl) *n.* [*L. prae* before *frons* forehead.] *Appl* a bone anterior to frontal of certain vertebrates *appl* paired plates or

scales anterior to frontal scale in some reptiles.

**pregammatum** (prē'gāmāshūn) *n.* [*L. prae* before *gammatum* dim. of *γ*] A bar in front of the gammatum in Palaeospondylii.

**p ganglionic** (prēgāng'glōn'ik) *n.* [*L. prae* before *Gk. ganglion* tumour] *Appl* medullated fibres from spinal cord ending in synapses around sympathetic ganglion coils.

**preglobulin** (prēglōb'ūlin) *n.* [*L. prae* before *globulus* small globe.] A compound protein of white blood corpuscles.

**prehallux** (prēhāl'ūks) *n.* [*L. prae* before *hallux* great toe.] A rudimentary additional digit on hind limb.

**prehalteres** (prēhāl'tērēs) *n. plu* [*L. prae* before *Gk. halter* weight.] The squamas of Diptera.

**prehistorium** (prē'hōstōrīūm) *n.* [*L. prae* before *historia* to drink.] A rudimentary root-like sucker.

**pr basall** (prēbēn'sāl) *n.* [*L. prae* before *basal* to seize.] Adapted for holding as a suctorial tentacle.

**prehepatic** (prē'hēpāt'ik) *n.* [*L. prae* before *hepar* liver] *Appl* part of digestive tract anterior to liver.

**prehate okinesis** (prēhēt'ōkīnēs'is) *n.* [*L. prae* before *Gk. hater* other *kinesis* movement.] Case of meiosis in which the sex-chromosome pairs undivided in one pole in the first permatocyte division.

**prehyaloid** (prēhī'oid) *n.* [*L. prae* before *Gk. hyaloides* T-shaped.] Mandibulo-hyoid *appl* cleft between mandible and ventral parts of hyoid arch.

**preinterparietal** (prētn'tērpār'tāl) *n.* [*L. prae* before *inter* between, *paries* wall.] One of two small upper membranous centres of formation of supraoccipital.

**pr lacteal** (prēlāk'tāl) *n.* [*L. prae* before *lact* milk.] Part of dentition which may occur previous to the milk dentition.

- prelocalization (prēlō'kālīzā shūn) *n.* [L. *prae* before; *locus* place.] The theory that certain portions of ovum are predestined to develop into certain organs parts.
- premandibular (prē'māndīb'ulār) [L. *prae* before *mandibulum* jaw] Anterior to mandible *appl.* sockets of Amphioxus *appl.* a bone of certain reptiles.
- premaxilla (prē'māksīl'ā) *n.* [L. *prae* before *maxilla*, jaw] A paired bone anterior to maxilla in most vertebrates or incisivum.
- premaxillary (prē'māksīl'ārī) *a.* [L. *prae* before *maxilla* jaw] Anterior to maxilla *part.* premaxilla.
- pr median (prēmē'diān) *a.* [L. *prae* before *medius* middle.] Anterior to middle of body or part *appl.* a head-plate in certain primitive fishes *appl.* vein in front of median vein of certain insect wings.
- pr molar (prēmō'lār) *a.* [L. *prae* before *mola*, mill.] *Appl.* teeth developed between canines and molars, bicuspid teeth.
- prenasal (prēnāl'zāl) *a.* [L. *prae* before *nasus* nose.] *Appl.* bone developed in septum in front of mesethmoid in certain skulls rostral.
- preocular (prēōk'ulār) *a.* [L. *prae* before *oculus* eye.] Anterior to the eye, as antennae, scales.
- preoperculum (prē'ōpēr'kūlūm) *n.* [L. *prae* before *operculum* cover] Anterior membrane bone of operculum or gill-cover preopercle preopercular bone.
- preoptic nerve,—*nervus terminalis* or terminal nerve *g.s.*
- praoral (prēō'rāl) *a.* [L. *prae* before *os* mouth.] Situated in front of mouth *appl.* cilia, etc. *appl.* food cavity the anterior part of the buccal cavity between labrum, prementum and mandibles in insects.
- preorbital (prēōr'bītāl) *a.* [L. *prae* before *orbis* circle.] Anterior to orbit *appl.* membrane bone of teleosts *appl.* glands in ruminants.
- preparietal (prēparī'ētāl) *n.* [L. *prae* before *paries* wall.] A bone

in front of parietals in some extinct reptiles.

- p spatagium (prēpātā'jūm) *n.* [L. *prae* before *spatagium* border] The alar membran or fold of skin extending between upper arm and forearm of birds.
- prepenna (prēpēn'ā) *n.* [L. *prae* before *penna* feather] A nestling down feather which is succeeded by adult contour feather; protoptile and mesoptile.
- pr pharynx (prēfār'ingks) *n.* [L. *prae* before Gk. *pharynx* gullet.] Narrow thin-walled structure connecting oral sucker and pharynx, in trematodes.
- prephragma (prēfrāg'mā) *n.* [L. *prae* before Gk. *phragma*, fence.] A phragma developed in relation with the notum of insects.
- prepituitary (prē pītū'tiārī) *n.* [L. *prae* before *pituita*, phlegm.] Anterior lobe of the pituitary gland prehypophysis.
- pr placental (prēplāsn'tāl) *a.* [L. *prae* before *placenta* flat cake.] Occurring before placenta formation or development.
- pr pl mela (prēplōom'ālā) *n.* [L. *prae* before *plumula*, small feather] A nestling down feather which is succeeded by adult down feather.
- pr pollex (prēpōl'ēks) *n.* [L. *prae* before *pollex* thumb.] A rudimentary additional digit occurring sometimes preaxially to thumb of certain amphibians and mammals.
- pr potency (prēpō'tēns) *n.* [L. *prae* before *potens* powerful.] The fertilization of flower by pollen from another flower in preference to pollen from its own stamens, when both are offered simultaneously capacity of one parent to transmit more characteristics to offspring than the other parent.
- prepotent (prēpō'tēnt) *a.* [L. *prae* before *potens* powerful.] Transmitting the majority of character traits *appl.* a flower exhibiting preference for cross-pollination.



- pr** puberal (prēpū'bērāl) *n.* [L. *prae* before *pubes* mature.] Anterior to pubis prepupal *g.s.*
- prepubertal** (prēpū'bērāl) *n.* [L. *prae* before *pubertas* adult state.] Part age or state before puberty
- prepubic** (prēpū'bik) *n.* [L. *prae* before *pubes* mature] Part prepubis *appl.* processes of pelvic arch, in certain fishes.
- prepubis** (prēpū'bis) *n.* [L. *prae* before *pubes* mature.] Part of pelvic girdl of certain reptiles anterior to os pubis.
- propuce** —*praepothum, g.s.*
- propupa** (prēpū'pā) *n.* [L. *prae* before *pupa* puppet.] A quiescent stag preceding the pupal in some insects.
- p** pyloric (prē'pilōr'ik) *n.* [L. *prae* before *pylor* gate keeper] *Appl.* oscicle hinged to pyloric oscicle in gastric mill of Crustacea.
- pr** pyramidal (prē'pirā'm'idāl) *n.* [L. *prae* before *pyramis* pyramid] In front of pyramid *appl.* a cerebellar fissure *appl.* tract, the rubrospinal fasciculus
- presentum** (prēskū'tūm) *n.* [L. *prae* before *scutum* shield] A terior sclerite of insect notum.
- p** es station-time,—minimum d relation of continuous stimulation necessary for production of a response
- prospe matid** (prēspēr'mātid) *n.* [L. *prae* before Gk. *sperma* seed] Secondary permatocyte
- p** sphenoid (p ēsf'noīd) *n.* [L. *prae* before Gk. *sphēn* edge] In many vertebrates cranial bone anterior to the bas sphenoid
- pressor** (prēs's) *n.* [L. *pressor* to press.] Causing rise of arterial pressure *appl.* stimuli nerve fibres.
- p** auu (prēh'ū) *n.* [L. *pressor* to press.] Tension in plant tissue caused by turgidity of cells.
- presternal** (prēstēr'nāl) *n.* [L. *prae* before *sternum* breast bone]

- Situated in front of sternum or breast bone *prst* anterior part of sternum.
- presternum** (prēstēr'nūm) *n.* [L. *prae* before *sternum* breast-bone.] The manubrium or anterior part of sternum anterior sclerite of insect sternum.
- pratracheal** (prē'trē'māt'ik) *n.* [L. *prae* before Gk. *trachea* hol] Pre branchial prespiracular *appl.* nerves running in anterior wall of first gill cleft to pharynx.
- pratrochantin** (prētrōk'ānt'in) *n.* [L. *prae* before Gk. *tracheaster* runner] Subcoxa.
- prevertebral** (prēvē'tēbrāl) *n.* [L. *prae* before *vertebra* vertebra.] Part or situated in region in front of vertebral column *appl.* portion of base of skull *appl.* ganglia of sympathetic system.
- p** evomer (prēvō'mēr) *n.* [L. *prae* before *ovomer* ploughshare.] A bone anterior to pterygoid in some vertebrates vomer of non-mammalian vertebrates in Monotremata a membrane bone in floor of nasal cavity the dumb-bell or paradoxical bone
- preragapophysis** (prē'rā'gāpōf'is) *n.* [L. *prae* before Gk. *aggon* yoke.] *ap.* from *physis* growth.] A process on anterior face of neural arch for articulation with vertebra in front
- prickle** (prīkl) *n.* [A S *prica* point] A pointed process arising through epidermal tissue as of brambles modified trichome
- pri kl** cells,—cells of deeper layers of stratified squamous epithelium, have short fine marginal connecting fibrils prickl-lik when broken.
- pr** mary (prīmārī) *n.* [L. *primitivus* first] First principal original *appl.* axis feathers meristem, root, wood etc Palaeozoic
- primary centr**—part of central nervous system directly linked by nerve fibres with peripheral organ.
- primary meristem**,—ground meristem procambium and protoderm / promeristem

**primæxi** (pri'mæ'k'si) *n.* [*L. primus* first *axilla*, armpit.] The first axillary arm of crinoid.

**primibrachia** (pri'mi-brä'k'si) *n. plur* [*L. primus* first; *brachia*, arms.] 1 crinoids, all brachials up to and including the first axillary

**primine** (pri'mi'n) *n.* [*L. primus* first.] The external integument of an ovule occasionally *appl.* first-formed or internal coat.

**primitæ** (pri'mi'ti) *n.* [*L. primus* first.] The first of any pair of individuals of a catenoid colony in pseudo-conjugation of Gregarinales, in which protomacrite of one (the satellite) becomes attached to deutomacrite of another (the primitæ)

**primitive** (pri'mi'tiv) *a.* [*L. primus* first; *origo*, original.] Of earliest origin *appl.* groove knot streak etc. *appl.* sheath, i.e. neurolemma.

**primitive node**—area of proliferating cells in which the primitive streak begins, thickened anterior wall of primitive gut. Hensen node.

**primitive pit**—enclosure at anterior end of the confluent primitive folds.

**primitive plate**—floor of the primitive groove

**primitive streak**—two primary embryonic folds between which lies the primitive groove.

**primordial** (pri'mör'diäl) *a.* [*L. primus* first; *origo*, beginning.] Primitive original first commenced first formed *appl.* ova, cell utricle, etc.

**primordium** (pri'mör'diüm) *n.* [*L. primus* first; *origo*, beginning.] Original form structure when first indicating assumption of form anlage.

**prionot** (pri'ö'dö't) *a.* [*Gk. prios* saw *odon* tooth.] Saw-toothed *appl.* stag-beetles with smallest development of mandible projections.

**priser** (pri'ser) *n.* [*L. primus* first *serere* to put in row.] Plant succession on area previously without vegetation primary sere.

**prismatic** (pri'mät'ik) *a.* [*L. prismus*, prism.] Like prism *appl.* calla,

leaves consisting of prisms, as prismatic layer of shells.

**pro-acrosome** (prü'äk rö'söm) *n.* [*Gk. pro* before *akros* tip *soma* body.] Structure in spermatid which develops into acrosome.

**proamnion** (prü'mn'ö) *n.* [*Gk. pro* before *amnion*, fetal membrane.] An area of blastoderm in front of head of early embryos of higher vertebrates.

**proandry** (prü'än drü) *n.* [*Gk. pro* before *andros* male.] Microandry with retention of anterior pair of testes only *Opp.* metandry

**proangiosperm** (prü'än'jö'sp-erm) *n.* [*Gk. pro* before *angion* vessel *sperma* seed.] A fossil type of angiosperm.

**proatlas** (prü'ät'läs) *n.* [*Gk. pro* before *Atlas*] A median bone unarticulated between atlas and skull in certain reptiles.

**probosciform** (prü'bös'fö'dif-erm) *a.* [*Gk. proboskis* trunk *L. forma*, shape.] Proboscis-like *appl.* infusorians with tentacles on a proboscis-like process.

**probosci** (prü'bös'is) *n.* [*Gk. proboskis* trunk.] A trunk-like process of head, as of insects, annelids, nemertean elephants.

**procambial strand**—a longitudinal strand of elongated cells near periphery of pterome of vascular bundle deunogen strand.

**procambium** (prü'käm'büm) *n.* [*L. pro* before *L.L. cambium* nutriment.] The tissue from which vascular bundles are developed.

**procarp** (prü'kä'p) *n.* [*Gk. pro* for *karpos* fruit.] The female organ of red seaweeds, one or more celled structure, consisting of the carpogonium, trichogyne, and auxiliary cells.

**procartilage** (prü'kä'r'til-ij) *n.* [*L. pro* before *cartilago* gristle.] The early stage of cartilage.

**proceroid** (prü'ä'r'köid) *n.* [*Gk. pro* before *keras* hair; *eidos* form.] Early larval form of certain costodes in first intermediate host.

- procerebrum (prōsēr'brūm) n. [L. *pro* before *cerēbrum* brain.] The fore-brain developed in preantennary region of insects.
- procerus (prōsēr's) n. [Gk. *pro* before *keras* horn.] Pyramidal muscle of the nose.
- prochorion (prōkōr'chōn) n. [Gk. *pro* before *chorion* skin.] An enveloping structure of blastodermic vesicle preceding formation of chorion.
- prochromatin (prōkrō'mātin) n. [Gk. *pro* before *chroma* colour.] Plasma substance paranoctem pyrenin, pseudochromatin.
- prochromosom (prōkrō'mōsōm) n. [Gk. *pro* before *chroma* colour *soma* body.] A discrete mass of basichromatin, primordium of the future chromosome.
- proclimax (prōklīmāks) n. [Gk. *pro* before *climax* ladder.] Stage in a ser appearing instead of usual climatic climax of proclimax.
- procoelous (p'rōkōl's) n. [Gk. *pro* before *kele* hollow.] With concave anterior face as vertebral centra.
- procoracoid (prōkōr'akoid) n. [Gk. *pro* before *corax* crow *eidos* form.] An anteriorly directed process from glenoid fossa of urodeles.
- procrascula (prōkrās'kulā) n. *plu* [L. *pro* for *dim* of *cras* leg.] A pair of blunt locomotory outgrowths on posterior half of redia.
- procrystal (prōkrip'ts) n. [Gk. *pro* before *krypsis* concealment.] Shape pattern colour or behaviour tending to make animals less conspicuous in their normal environment camouflage.
- procryptic (p'rōkrip'tik) n. [Gk. *pro* for *kryptos* hidden.] With coloration or pattern adapted for concealment.
- proctal (prōktāl) n. [Gk. *proctos* anus.] Anal *appt* fish fin.
- proctiger (prōktijē) n. [Gk. *proctos* anus L. *gerer* to bear.] Anal portion of terminalia. Diptera anal lobe.
- proctodaeum (prōk. odē'ūm) n. [Gk.

- proctos* anus *hodos* way.] The latter part of embryonic alimentary canal, formed by anal invagination a similar ectoderm-lined part in certain invertebrates.
- procumbent (prōkūm'bent) n. [L. *pro* forward *cumbens* lying down.] Prostrate trailing on the ground *appt* stems.
- prodeltidium (prōdeltid'itūm) n. [Gk. *pro* before *delta* *strom* stream.] A plate which develops into a pseudodeltidium.
- prodentine (prōdēt'nin) n. [L. *pro* before *dens* tooth.] A layer of uncalcified matrix capping tooth cusps before formation of dentine.
- proembryo (prōēm'brō) n. [Gk. *pro* before *embryon* foetus.] An embryonic structure preceding true embryo first results of spore germination.
- proenzyme (prōēn'zim) n. [Gk. *pro* before *en* in *zyme* leaven.] Zymogen.
- proepimeron (prōēpimē'rōn) n. [Gk. *pro* before *epi* upon *meros* upper thigh.] A sclerite posterior to propleura posterior pronotal lobe of Diptera.
- profunda (prōfūn'dā) n. [L. *pro* *fundus* deep.] Deep-seated, *appt* a branch of brachial, femoral or costocervical artery ramine artery terminal part of lingual artery a vein of femur n. A deep artery or vein.
- progamete (prōgāmēt) n. [Gk. *pro* before *gamos* marriage.] A structure giving rise to gametes by abstraction in certain fungi.
- progamit (prōgām'it) n. [Gk. *pro* before *gamos* marriage.] *appt* brood-down on for gamet production.
- progastrin (prōgās'trin) n. [Gk. *pro* before *gaster* stomach.] Precursor of gastric secretion in mucous membrane of stomach.
- progenesis (prōjēn'sis) n. [Gk. *pro* before *genesis* origin.] The maturation of gametes before completion of body growth / neoteny.

- progeotropism (prō'jēō rōpizm) *n* [Gk. *pro* for *ge* earth *trope* turn.] Positive geotropism.
- progestational (prōjēsŭl ōhōnāl) *a*. [L. *pro* for *gestere* to bear] *Appl.* phase of oestrous cycle during luteal and endometrial activity *appl.* hormones controlling uterine cycle and preparing uterus for nidation.
- progesterone (prōjēs tērōn) [L. *pro* for *gestere* to bear] A crystalline steroid  $C_{21}H_{32}O$  pure progestational corpus luteum hormone corpora lutea progestin progesterone
- progestin (prōjēs'tin) *n*. [L. *pro* for; *gestere* to bear] Progestational hormone of corpus luteum containing progesterone brand of progesterone
- proglottides (prōglō'tīdes) *n. plur* [Gk. *pro* for *glōtis* tongue.] The propagative body-segments of tape-worm, formed by strobilation from neck. *Sing* proglottis.
- prognathous (prōg'nāthūs) *a*. [Gk. *pro* forth *gnathos* jaw] Having prominent projecting jaws with projecting anthers prognathic.
- progonal (prōg'ōnāl) [Gk. *pro* before *gonos* begetting] *Appl.* sterile anterior portion of genital ridge.
- prohydrotropism (prō'hīdrōt rōpizm) *n*. [Gk. *pro* for *hydra* water *trope* turn.] Positive hydrotropism.
- proleospory (prōlō'spōrī) [Gk. *prole* early *sporos* seed.] Premature development of spore prospory
- projectile (prōjēk'tīl) [L. *pro* forth *jacere* to throw] Projectile that can be thrust forward.
- projection (prōjēk'shōn) [L. *pro* forth, *jacere* to throw] The referring of stimulations to end-organs of sense by means of connecting projection nerve-fibres the throwing forth by plant of pollen spores, or seed
- projici *v* (prōj'ish ēnt) [L. *pro-* *jiciens* projecting] *Appl* sense organs reacting to distant stimuli, as light sound.
- prolactin (prōlāk'tin) *n*. [L. *pro* for *lac* milk.] The lactogenic prepituitary hormone.
- prolamin *n*.—a class of proteins present in seeds of cereals.
- prolamin, — gonadotropic hormones occurring in various tissues and body-fluids during pregnancy in some mammals, prolamin A stimulating ovarian follicles and maternal germ cells, prolamin B being the luteinizing hormone.
- proleg (prō'lēg) *n*. [L. *pro* for M.E. *leg* leg] An unjointed abdominal appendage of arthropod larvae prolegs.
- proleocyte (prōlō'kōēt -lōō) *n*. [Gk. *pro* before *leukos* white *kytos* hollow] A small leucocyte with basophil cytoplasm and large uclei and developing into macro-nucleocyte, in insects.
- proliferate (prōlīf'ērāt) *v* [L. *proles* offspring *ferre* to bear] To reproduce repeatedly to resume growth of reproductive shoots.
- proliferation (prōlīf'ērā'shōn) *n* [L. *proles* offspring *ferre* to bear] Proliferation increase by frequent and repeated reproduction.
- proliferous (prōlīf'ērūs) *a*. [L. *proles* offspring *ferre* to bear] Multiplying quickly *appl* bud-bearing leaves developing supernumerary parts abnormally
- prolocules (prōlōk'ūlūs) *n*. [L. *pro*, before *loculus* compartment.] First chamber microspheric when formed by conjugation of swarms spores, megalospheric when formed asexually by fission, in polythalamous foraminifera.
- promeristem (prōmēr'istēm) *n*. [Gk. *pro* before *meristos* divider] Meristem of growing point, and primary meristems.
- prometaphase (prōmēt'āfās) *n* [Gk. *pro* before *metas*, after; *phasis* appearance.] Stage between prophase and metaphase in mitosis and meiosis.

promitosis (prō mītō sis) *n.* [Gk. *pro* before *mitos* thread.] A simple type of mitosis, exemplified in nuclei of protokaryon type protomitosis, *q.v.*

promontory (prōm ōntōrē) *n.* [L. *pro* forth *mons* mountain.] Prominence or projection, as of cochlea and sacrum.

promorphology (prō mōrfoī lōj) *n.* [Gk. *pro* before *morphe* form *logos* discourse.] Morphology from the geometrical standpoint.

promuscia (prōmŭs'cia) *n.* [L. *promus* proboscis.] The proboscis of Hemiptera.

promycellium (prō mīkē'liŭm) *n.* [Gk. *pro* before *mykes* mushroom.] Mycelium developing from a xygospore itself growing into a sporangium or to spongia protobandium.

pr myelocyte (prēmī'fēitē) *n.* [Gk. *pro* before *myelos* marrow *kylō* hollow.] Amoeboid marrow cell which develops into a myelocyte or granulocyte.

pr nate (prō nāte) *n.* [L. *pro* to bend forward.] Prose inclined.

p oaction (prōnā'ahŭn) *n.* [L. *pro* to bend forward.] Act by which palm of hand is turned downwards by means of pronator muscles of supination.

pronephros (prōnēf'rit) *n.* [Gk. *pro* before *nephros* kidney.] *Part* of the region of pronephros *appt* duct tubules.

pr onephros (prōnēf'rit) *n.* [Gk. *pro* before *nephros* kidney.] The fore kidney of embryonic larval life.

pr notum (prōnō'tŭm) *n.* [Gk. *pro* before *noton* back.] The dorsal part of prothorax of insects.

pr nucel us (prōnŭ'kleŭs) *n.* [L. *pro* before *nucleus* kernel.] Egg or sperm nucleus after maturation.

pronymph (prō nīmē) *n.* [L. *pro* before *nympha* maiden.] The stage in metamorphosis of Diptera preceding nymph stage.

pro-oestrus (prō ēstrŭs) *n.* [Gk. *pro* before *oestros* gadfly.] Period of preparation for pregnancy phase before oestrus a heat pro-oestrum.

pro-ostracum (prōō'strāktŭm) *n.* [Gk. *pro* before *ostrakon* shell.] The horny pen of a decapod dibranchiate shell or belemnite anterior phragmocone.

prootic (prō'ōtik) *n.* [Gk. *pro* before *ous* ear.] The anterior bone of otic capsule in vertebrates. *n Part* a centre of ossification of petromastoid part of temporal bone.

propagative (prōp āgātiv) *n.* [L. *propagare* to propagate.] Reproductive *appt* a cell, a phase, an individual of a colony.

propagulum (prōpāg'ŭlŭm) *n.* [L. *propagare* to propagate.] A bud or shoot capable of developing into an adult propagula.

propatagium,—prepatagium, *q.v.*

propes (prōpēs) *n.* [L. *pro* before *pes* foot.] Proleg *q.v.*

prophase (prō'fāz) *n.* [Gk. *pro* before *phasis* appearance.] The preparatory changes the first stage in mitosis, or in meiosis.

prophloeem,—protophloeem, *q.v.*

prophototropism (prō'fōtō'rōptŭm) *n.* [Gk. *pro* for *phos* light *trope* turn.] Positive phototropism.

p ophyllum (prōfīl'ŭm) *n.* [Gk. *pro* before *phyllon* leaf.] A small bract or bracteole first foliage leaf at base of branch prophyll.

pr pleuron (prōphlōr'ŭn) *n.* [Gk. *pro* before *pleuron* side.] A lateral plate of prothorax of insects.

propneustic (prōnēstik, prōnēst-) *n.* [Gk. *pro* before *neustos* to breathe.] With only prothoracic spiracles open for respiration.

p odæon (prōpō dēŭn) *n.* [Gk. *pro* before *podus* foot.] An abdominal segment in front of petiole or podoon, of Hymenoptera other than the median segment, Latreille's segment, epinotum, propodeum.

propodit (prō pōdīt) *n.* [Gk. *pro* before *podus* foot.] Foot segment sixth from body in Malacostraca tibia in piders.

propodium (prōpō'diŭm) *n.* [Gk. *pro* before *podus* foot.] The small anterior part of a molluscan foot.

**propodosoma** (prō'pōdōsō mā) *n.* [Gk. *pro* before *podus* foot *soma*, body] Body region bearing first and second legs in Acarina.

**propolis** (prō'pōlīs) *n.* [Gk. *pro* for *polis* city] Resinous substance from buds or leaf axils of certain trees, utilized by worker bees to fasten comb portions and fill p crevices bee-glue.

**propone** (prō'pōn) *v.* [L. *pro* before *pono* bridge.] Alae pontis delicate bands of white matter crossing anterior end of pyramidal below pons Varolii ponticulus.

**proprioceptor** (prō'prīōsēptōr) *n.* [L. *proprius* one's own *capere* to take.] A receptor in muscle tendon vestibule of internal ear etc.

**propriogeni** (prō'prīōjēn'ik) *a.* [L. *proprius* one's own *genus* kind.] Appl. effectors other than muscle or organs which are both receptors and effectors of myogenic.

**propriocephal** (prō'prīōsēf'al) [L. *proprius* one's own *cephalus* spine.] Part wholly t the spinal cord appl. fibres, etc.

**prop-roots**,—adventitious eral roots growing downwards from stem, as in mangrove and maizen.

**propterygium** (prō'tērij'iām, prō'ptērij'iām) *n.* [Gk. *pro* before *pteryx*, little wing] The foremost of three basal cartilages supporting pectoral fin of elasmobranchs.

**propulsi** pseudopodium, — in some Neosporidia pseudopodium developed posteriorly which by its elongation pushes the body forward

**propupa** (prōpū'pā) *n.* [L. *pro* before *pupa*, puppet] Stage in insect metamorphosis preceding pupa stage prepupa.

**propygidium** (prō'pīd'iām) *n.* [Gk. *pro* before *pygidium* small rump.] The dorsal plate anterior to pygidium in Coleoptera.

**protractilis** (prō'trākt'is) *n.* [Gk. *pro* before *tractis* spine.] The face of Pennatulacea which is sterile and coincides with analcar aspect of terminal sord.

**proral** (prō'rāl) *a.* [Gk. *pro* prows] From front backwards appl. jaw movement, as in rodents. Opp. palinal.

**proread** (prō'rād) *adv.* [L. *proread* forwards *ad* to.] Anteriorly forward.

**prorsal** (prō'rāl) *a.* [L. *proread* forwards.] Anterior

**proscapula** (prō'skāp'ulā) [L. *pro* before *scapula*, shoulder blade] The clavicle

**proscotex** (prō'skōt'eks) *n.* [Gk. *pro* before *skotos* worm.] A rounded cyst with fluid-filled cavity a stage in development of tape-worm

**prosecretin** (prō'sēkrē'tin) *n.* [L. *pro* before *secretus* separated.] The precursor of secretin pro-secretine.

■ **proencephalization** (prō'ēnkēf'āl-izā'shōn, -ēf) *n.* [Gk. *pro* before *encephalus* brain.] The progressive shifting of controlling centres towards the fore-brain and the increasing complexity of cerebral cortex in the course of evolution.

**proencephalon** (prō'ēnkēf'ālōn) *n.* [Gk. *pro* before *encephalus* brain.] The fore-brain, comprising telencephalon and diencephalon the first primary brain-vesicle

**proenchyma** (prō'ēng'kimā) *n.* [Gk. *pro* near *enchyma*, infusion.] Thawed of proenchymatous cells.

■ **proenchyma** (prō'ēng'kimā) *n.* [Gk. *pro* near *enchyma*, infusion.] Appl. elongated pointed cells, with thin or thick cell-walls, as in mechanical and vascular tissues of plants. Opp. parenchymatous.

**proethmoid** (prō'ēth'mōid) *n.* [Gk. *pro* near *ethmos* sieve *eides* form.] An anterior cranial bone of teleosts.

**prosthion** (prō'st'hiōn) *n.* [Gk. *pro* for *stipes* tube.] A spout-like prolongation of edges of mantle-flaps of certain molluscs exoduphunc

prosocoel (prō'sō'el) *n*. [Gk. *pros* forward *koilos* hollow] A narrow cavity in epistome of Molluscolidea, the first main part of coelom median cavity between third and lateral ventricles of brain inter-ventricular foramen.

prosoctic (prō'sō'st'ik) *a*. [Gk. *pros* advance] Anterior to beak *appl* certain bivalve ligaments.

prosoctus (prō'sō'ctus) *n*. [Gk. *pros* advance] A delicate canalicule between chamber and uncurent canal = some porges

prosome (prō'sō'm) *n*. [Gk. *pro* before *soma* body] The anterior part of body = cephalothorax.

prosoptis (prō'sō'ptis) *n*. [Gk. *pros* forward *opsis* gate] The aperture of communication between neurent and flagellate canals in some porges

prospory (prō'spō'ri) *n*. [Gk. *pro* before *spor* seed] Precocious development of sporangia seed production in plant that re not fully developed

prostalia (prō'stā'li) *n*. [L. *pro* forth *stare* to stand.] Projecting specules of Hexacnemella.

prostate (prō'stāt) *a*. [L. *pro* before *stare* to stand] *Appl* a muscular and glandular organ around commencement of male urethra in pelvic cavity *n*. The prostate gland the spermiducal gland in amels.

prostat (prō'stāt'ik) *a*. [L. *pro* before *stare* to stand.] *Part* prostate gland *appl* duct nervinus utriculo hormone etc

protemmat (prō'tēm'māt) *a*. [Gk. *pro* before *temma* wreath] *Appl* an ante-ocular structure or organ of some Collembola, of doubtful function protemmatic

prosteron (prō'stēr'ōn) *n*. [L. *pro* before *sternum* breast bone] Ventral part of prothorax of insects presternum *q*

protheca (prō'thē'ka) *n*. [Gk. *pro* ante *theca* appendage] Movable inner lobe of mandible *cras* beetle larva

prosthetic (prō'thēt'ik) *a*. [Gk. *prosthes* added.] *Appl* non-protein constituent of a conjugated or compound protein.

prothion (prō'thion) *n*. [Gk. *pro* first *thion* foremost.] The alveolar point middle point of the upper alveolar arch.

prothomere (prō'thō'mēr) *n*. [Gk. *pro* first *thomere* forward *mer* part] Most anterior or preoral somite

prostomiate (prō'stō'miāt) *a*. [Gk. *pro* before *stoma* mouth.] Having a portion of head in front of mouth.

prostomium (prō'stō'miūm) *n*. [Gk. *pro* before *stoma* mouth.] In worms and molluscs part of head anterior to mouth.

prostrate (prō'strāt) *a*. [L. *pro* stretched *trahere* thrown down.] Procumbent; trailing on the ground.

protamines.—simple basic proteins occurring in fish testes.

protandrium (prō'tān'drīm) *n*. [Gk. *protos* first *andros* male] Protandry sometimes exclusively in zoological application.

protandrous (prō'tān'drūs) *a*. [Gk. *protos* first *andros* male.] Exhibiting protandry proterandrous.

protandry (prō'tān'drī) *n*. [Gk. *protos* first *andros* male.] Coodition of hermaphrodite plants and animals where male elements mature and are shed before female elements mature proterandry

protasplia (prō'tā'splī) *n*. [Gk. *protos* first *asphe* shield] Developmental stage of trilobites

protaxis (prō'tāk'sis) *n*. [Gk. *protos* first *axis* = axle] Primordial filament or axis in evolution of plants etc

protaxon (prō'tāk'sōn) *n*. [Gk. *protos* first *axis* = axle] Axon-base

protease (prō'tē'ās) *n*. [Gk. *protos* first] Any proteolytic enzyme.

protogulum (prō'tō'gū'lūm) *n*. [L. *pro* before *tegulum* covering] The semicircular or semicircular embryonic shell of brachiopod

**proteid** (prō'tēid) *n.* [Gk. *protos* first *eidos* form.] The nitrogenous material of plant cells albuminous substance a term subject to varying restrictions by different authors *protein, q.v.*

**protei** (prō'tēin) *n.* [Gk. *protos* first.] Albuminous substance a nitrogenous compound of cell protoplasm complex substance characteristic of living matter and consisting of aggregates of amino-acids, and generally containing sulphur

**proteinism** (prō'tēizm) *n.* [L. *Proteus* a sea-god.] The capacity to change shape, as of amoeba and some other Protista.

**protambyo** (prō'tēmbiō) *n.* [Gk. *protos* first *embryon* embryo.] The fertilised ovum and its cleavage stages preceding formation of blastula.

**prota tomos** (prō'tētōmōn) *n.* [Gk. *protos* first *entomon* insect.] The hypothetical archetype of insects.

**proteolasti** (prō'tēōlās'tik) *a.* [Gk. *protos* first *lasis*, to break.] *Appl.* enzymes or ferment which break down proteins proteolytic.

**proteolytic** (prō'tēōlō'tik) *a.* [Gk. *protos* first *lysis* loosing.] *Appl.* enzymes which change proteins into proteoses, peptones, polypeptides, and eventually into amino acids.

**proteose** (prō'tēōs) *n.* [Gk. *protos* first.] The first cleavage product of action of hydrolysis on a protein molecule.

**proterandrou** (prō'tērān drōs) *a.* [Gk. *protos* earlier *andros* male.] Protandrous, *q.v.* *proterandric.*

**proteranthous** (prō'tērān'thōs) *a.* [Gk. *protos* earlier *anthos* flower.] Flowering before foliage leaves appear

**proterogamais** (prō'tērōjēn gāis) *n.* [Gk. *protos* forward *gamais* descent.] Foreshadowing of dult or later forms by youthful or earlier forms. *Opp.* palingenesis.

**proteroglyph** (prō'tērōglif) *a.* [Gk. *protos* in front *glyphein* to

carve.] With specialised fang teeth in anterior upper jaw region.

**proterogyno** s (prō'tērōj'ōnōs) *a.* [Gk. *protos* earlier *gynē* woman.] Proterogynous.

**proterosoma** (prō'tērōs'mā) *n.* [Gk. *protos* forward *soma* body.] Body region comprising gnathosoma and propodosoma, in Acarina.

**prototyp** (prō'tērōtip) *n.* [Gk. *protos* earlier *typos* pattern.] Original or primary type as holotype, paratypes, syntypes.

**P of rozoic** (prō'tērōzō'ik) *a.* [Gk. *protos* earlier *zoōn* animal.] *Pari* or *appt* the older Palaeozoic faunal epoch, the age of primitive invertebrates.

**prothallial** (prō'thāl'iāl) *a.* [Gk. *pro* before *thallos* young shoot.] *Pari* prothallus *appt* cell i pollen grain of gymnosperms, considered as vestige of thallus.

**prothallium**,—**prothallus**, *q.v.*

**prothalloid** (prō'thāl'oid) *a.* [Gk. *pro* before *thallos* young shoot *eidos* form.] Like prothallus.

**prothallus** (prō'thāl'ūs) *n.* [Gk. *pro* before *thallos* young shoot.] A small, thin structure, the gametophyte or haploid sexual generation of pteridophytes, developed from spores *prothallus q.v.*

**protheca** (prō'thē'kā) *n.* [Gk. *pro* before *thēke* box.] The rudiment of coral formation basal part of coral calicle.

**prothetely** (prō'thēt'etl) *n.* [Gk. *prothēte* to run before *telos* completion.] The development or manifestation of pupal or imaginal characters in insect larva. *Opp.* hysterothetely

**prothorax** (prō'thō'rāk) *n.* [Gk. *pro* before *thorax* chest]. Anterior thoracic segment f Arthropoda.

**prothrombin** (prō'thrōm'bīn) *n.* [Gk. *pro* before *thrombos* clot.] Thrombogen, after activation by thromboplastin and calcium, forming thrombin

**prothylasome** (prō'thī'lāsōm) *n.* [Gk. *protos* first *hylas* glass *soma* body.] The area surrounding germinal spot in germinal vesicle.



**protista** (prōtī'stā) *n. plu* [Gk. *protistos* first of all.] The primitive organisms from which animals and plants arose; protobionta, protophyta and protozoa.

**protiatology** (prō'tistōl'ōjī) *n* [Gk. *protistes* first of all *logos* discourse.] The science dealing with primitive forms of life.

**proto-acidium** (prō'tōsīd'itūm) *n* [Gk. *protas* first *ochidi* *n* small house.] A cell-mass surrounded by hyphal layers, containing cells eventually producing ecdysosporos and disjunctive cells *acetal* *pril* mordium primordial acidium.

**protobasidium** (prō'tōbāsīd'itūm) *n* [Gk. *protas* first *basidium* small pedestal.] A basidium producing mycelium of four cells from each of which sporidium is developed by abstraction promycelium.

**protoblast** (prō'tōblōst) *n.* [Gk. *protas* first *blastos* living.] A protist, protophyton or protozoon.

**protoblast** (prō'tōblōst) *n.* [Gk. *protas* first *blastos* bud.] A naked cell devoid of membrane first or single-cell stage of an embryo blastomere which develops into definite organ or part internal bud stage in life-history of Neosporidia.

**protobroch** (prō'tōbrōk) *n.* [Gk. *protas* first *brochos* mesh.] *Appl.* nuclei of gonads in resting stage of deutobroch.

**protoccephalon** (prō'tōkēf'ālōn -ēf) *n.* [Gk. *protas* first *kephale* head.] Head part of cephalothorax in Malacostraca first of six segments composing insect head.

**protocercal** (prō'tōsēr'kāl) [Gk. *protas* first *cercos* tail.] Having caudal fin divided into two equal lobes *d* phycercal, the primitive form of caudal fin.

**protocerebrum** (prō'tōsēr'ēbrūm) *n.* [Gk. *protas* first *L. cerebrum* brain.] Anterior pair of ganglionic centres of crustaceans anterior part of insect brain formed by fused ganglia of optic segment of head protocerebrum.

**protochlorophyll** (prō'tōklōrōfīl) *n* [Gk. *protas* first *chloros* green *phyllon* leaf.] A substance which is converted to chlorophyll by agency of light etiolin.

**protocnemes** (prō'tōknēmz) *n. plu* [Gk. *protas* first *cnemes* wheel-spoke.] The six primary pairs of mesenteries of Zoantharia.

**protoconch** (prō'tōkōngk) *n.* [Gk. *protas* first *konche* shell.] The larval shell of mollusca, indicated by cicatrix on adult shell.

**protocon** (prō'tōkōn) *n.* [Gk. *protas* first *konos* cone.] Inner cusp of upper molar.

**protoconid** (prō'tōkōnīd) *n* [Gk. *protas* first *konos* cone *oides* form.] External cusp of lower molar.

**protoconule** (prō'tōkōnūl) *n.* [Gk. *protas* first *konos* cone.] Anterior intermediate cusp of upper molar.

**protocorm** (prō'tōkōrm) *n* [Gk. *protas* first; *horner* trunk.] Swelling of rhizophore preceding root formation as in certain club-mosses undifferentiated cell-mass of archegonium in Ginkgoales.

**protocranial** (prō'tōkrā'nīl) *n.* [Gk. *protas* first *cranium* skull.] Posterior part of insect epicranium.

**protoderm** (prō'tōdērm) *n.* [Gk. *protas* first *derma*, skin.] The outer cell layer of plical in ristem primordial epidermis of plants pericardial dermatogen.

**protoepiphyte** (prō'tōēpīfīt) *n* [Gk. *protas* first *epi* upon *phyton* plant.] A plant growing upon another and getting all its nourishment from that other.

**protosfibril** (prō'tōsfībrīl) *n. plu.* [Gk. *protas* first *L. fibrilla* small fibre.] Minute threads seen in ground substance between sub-microscopic fibrils in connective tissue.

**protogen** (prō'tōjēn) *n* [Gk. *protas* first *genos* descent.] A dominant allelomorph *off* allele-gene.

protogenesis (prō'tōjēn ēsis) *n.* [Gk. *protos* first; *genesis* origin.] First embryonic stage, including development of archenteron of deuterogenesis.

protogeni (prō'tōjēn'ik) *a.* [Gk. *protos* first; *gonos* offspring.] Persistent from beginning of development.

protogynous (prō'tōjīnūs) *a.* [Gk. *protos* first; *gynē* woman.] Having female elements mature before male: protogynous.

protogyny (prō'tōjīnī) *n.* [Gk. *protos* first; *gynē* woman.] Condition of hermaphrodite plants and animals in which female elements mature and are spent before maturation of male elements: protogyny.

prot haem (prō'tōbēm) *n.* [Gk. *protos* first; *haema*, blood.] Haematin.

protokaryon (prō'tōkēr'ōn) *n.* [Gk. *protos* first; *karyon*, nut.] A simple or primitive nucleus consisting of mass of chromatin suspended in nuclear sap.

protol ph (prō'tōlōf) *n.* [Gk. *protos* first; *lophos* crest.] Anterior transverse crest of upper maxilla.

protomala (prō'tōmālā) *n.* [Gk. *protos* first; *L. mala*, cheek.] A mandible of myriopods.

protomerite (prō'tōmērīt) *n.* [Gk. *protos* first; *meros* part.] Anterior part of medullary protoplasm of adult gregarious of primata.

protomit (prō'tōmīt) [Gk. *pro* early; *tomē* cutting; *mitos* thread.] Stage between tomont and tomito: I of cycle of Holotricha.

protomitosis (prō'tōmītōsis) [Gk. *protos* first; *tomē* thread.] Primitive mitosis: cruciform division, as in slime fungi: promitosis.

protomonostelic (prō'tōmōnōstēl'ik) *a.* [Gk. *protos* first; *monos* alone; *stelis* column.] *Appl.* stem or root with protostele or central cylinder.

protomont (prō'tōmōnt) *n.* [Gk. *pro* early; *tomē* cutting; *mitos*, being.] Transitory stage, between

trophont and tomont, with condensed central nucleus, in life cycle of Holotricha.

protomorpho (prō'tōmōf'ik) *a.* [Gk. *protos* first; *morphē* form.] First formed: primordial.

protoema (prō'tōnē'mā) *n.* [Gk. *protos* first; *ema*, thread.] The filamentous thallus of mosses from which the moss plant body early filamentous stage in development of certain algae.

protonematoid (prō'tōnē'mītōid) *a.* [Gk. *protos* first; *nerve* thread; *oides* form.] Like protonema.

protonephridial (prō'tōnēf'rīd'īāl) *a.* [Gk. *protos* first; *nephros* kidney.] *Appl.* excretory water-vascular system of flat worms.

protonephridium (prō'tōnēf'rīd'īōm) *n.* [Gk. *protos* first; *nephros* kidney; *idion* dim.] The primitive excretory tube, with coelomic opening: protonephridiostome.

protoneurone (prō'tōnē'rōn) *n.* [Gk. *protos* first; *neuron* nerve.] The primitive intermediary cell connecting receptor with effector: cellular unit of nerve net: unipolar ganglion cell.

protopathi (prō'tōpāth'ik) *a.* [Gk. *protos* first; *pathos* feeling.] *Appl.* stimuli and nerve systems concerned with sensation of pain and marked variations in temperature.

protoperle (prō'tōpēr'ēl) *n.* [Gk. *protos* first; *perle* digestion.] Solution and alteration of food material accomplished in stomach.

protophloem (prō'tōf'lōēm) *n.* [Gk. *protos* first; *phloem* inner bark.] The first phloem elements of vascular bundle.

protophyte (prō'tōf'it) *n.* [Gk. *protos* first; *phytē*, plant.] A unicellular vegetable organism or primitive plant: protophyton.

protoplasm (prō'tōplāzm) *n.* [Gk. *protos* first; *plasma*, form.] Living cell substance: cytoplasm and karyoplasm.

protoplasmic (prō'tōplāz'mik) [Gk. *protos* first; *plasma*, form.] Part or consisting of protoplasm.

**protoplasmic bead**,—structure on anterior part of middle piece of mammalian spermatozoon.

**protoplast** (prō'tōplāst) *n.* [Gk. *protes* first *plastēs* formed.] An energid living uninucleate primitive protoplasmic unit protoplasm of one cell.

**protopod** (prō'tōpōd) *n.* [Gk. *protes* first *podēs* foot.] With feet or legs on anterior segments.

**protopodit** (prō'tōpōdit) *n.* [Gk. *protes* first *podēs* foot.] Basal segment of arthropod limb.

**proptile** (prō'tōtīl -tīl) *n.* [Gk. *protes* first *ptilon* feather] The primary prepenna succeeded by mesoptile.

**protoscolex**,—proscölex, *g.s.*

**protospore** (prō'tōspōr) *n.* [Gk. *protes* first *spōros* seed.] A spore of first generation a mycelium producing spore.

**protostele** (prō'tōstēl) *n.* [Gk. *protes* first *stēle* column] Concentric bundle pithless central cylinder of vascular tissue of most roots and stem stems

**protostigmata** (prō'tōstīg'mātā) *n.* *plu.* [Gk. *protes* first *stigma*, pricked mark.] Two primary gill slits of embryo

**protostoma** (prō'tōstōmā) *n.* [Gk. *protes* first *stoma*, mouth] Original mouth of gastrula blastopore.

**protostylic** (prō'tōstīl'ik) *a.* [Gk. *protes* first *styla* column.] Exhibiting protostily or having lower jaw connected with cranium by original dorsal end of arch.

**prot thall** *s.* (prō'tōthāl'ōn) *n.* [Gk. *protes* first *thall* young shoot] First formed structure which develops into a thallus as of lichen.

**prototheca** (prō'tōthē'ka) *n.* [Gk. *protes* first *thēke* box.] A skeletal cup-shaped plate at basal end of coral embryo the first skeletal formation

**prototherian** (prō'tōthēr'ian) *n.* [Gk. *protes* first *therion* small animal.] *Appl* egg-laying mammals without placenta.

**prototroch** (prō'tōtrōk) *n.* [Gk. *protes* first *trochos* wheel.] A pre-oral circle of cilia of a trochosphere trochelminth larva.

**prototroph** (prō'tōtrōf'ik) *n.* [Gk. *protes* first *trophē* nourishment.] Nourished from one supply or in one manner only feeding on inorganic matter *appl* iron, sulphur and nitrifying bacteria *appl* plants.

**prototype** (prō'tōtīp) *n.* [Gk. *protes* first *typos* model.] An original type species or example; an ancestral form.

**protovertebrae** (prō'tōvēr'tēbrē) *n.* *plu.* [Gk. *protes* first *L. vertebra*, vertebra.] A series of primitive mesodermal segments in vertebrate embryo.

**protoxyl** *m.* (prō'tōksīlēm) *n.* [Gk. *protes* first *xylon* wood] Primary xylem lying next pith of stems.

**prot zoon**,—*plu.* of protozoon.

**protozoa** (prō'tōzōz'ā) *n.* [Gk. *protes* first *zōon* animal.] Stage in life-history of certain arthropods, succeeding free-swimming na plus.

**protozoology** (prō'tōzōdī'olī) *n.* [Gk. *protes* first *zōon* animal *logos* discourse] The branch of zoology dealing with protozoa.

**protozoon** (prō'tōzō'ōn) *n.* [Gk. *protes* first *zōon* animal] A unicellular or non-cellular animal organism *Plu.* protozoa

**protozygot** (prō'tōzīf'gōt) *n.* [Gk. *protes* first *zygon* yoke.] A homozygote having dominant characters. *appl* allozygote.

**protractor** (prō'trāk'tōr) *n.* [L. *pro* forth *tractus* drawn out.] A muscle which draws out or extends part.

**protria** *no.* (prō'trīēn) *n.* [Gk. *pro* before *trias* trident.] A triene with anteriorly-directed branches.

**provascular tisa** —procambium.

**prove tricus** (prō'vēntrik'ōlōs) *n.* [L. *pro* before *ventriculus* small stomach.] 1 decapod crustaceans, the so-called stomach containing

- gastric mill In insects, the digestive chamber anterior to stomach in worms, that anterior to gizzard; in birds, the glandular stomach anterior to gizzard.
- provincularia (prōvīn'kūlār) n. [L. *pro* before *vinculum* bond.] A primitive hinge of young stages of certain Lamellibranchia.
- provitamin (prōvī'tāmin) n. [Gk. *pro* before L. *vitā*, life *avononide* *care*, resinous gum.] Precursor of vitamin.
- proximal (prōk'simāl) a. [L. *proximus* next.] Nearest body centre or base of attachment *opp* distal.
- pronotite (prōnō'tit) n. [Gk. *pro* before *noton* girdle.] The anterior ring of diplosomite. *Opp* meta notite.
- prosynogen (prōsīn'ogēn) n. [Gk. *pro* before *syn* to join; *genes* producing.] Precursor of synogen, activated by secretin.
- pruinose (prō'īnōs) a. [L. *pruinus*, hoar frost.] Covered with whitish particles or globules; covered by bloom.
- psalterium (sāl'tērīum, psāl-) n. [L. *psalterium*, psalter.] The third stomach of ruminants, the cecum or manyplies the hyra, a thin triangular lamina joining lateral portions of fornx.
- psammophilous (sāmōf'īlās, psām-) a. [Gk. *psamos* sand *philos* loving.] Thriving in sandy places.
- psammophore (sāmōf'ōr psām-) n. [Gk. *psamos* sand *phoros* carrying.] One of rows of hairs under mandibles and sides of head in desert ants, used for removal of sand grains.
- psammophyte (sāmōf'īt, psām-) [Gk. *psamos* sand *phuton* plant.] A plant growing in sandy or gravelly ground.
- psammoser (sāmōsēr psām-) n. [Gk. *psamos* sand L. *serere* to put in row.] A plant succession originating in a sandy area, as on dunes.
- pseudambulacrum (sī'dāmbūllākrām, psāl-) n. [Gk. *pseudes* false L. *ambulare* to walk.] The lancet plate with adhering side-plates and covering plates of Blastoides.
- ps. annual (sīdān'nāl, psāl-) n. [Gk. *pseudes* false L. *annus* year.] A plant which completes its growth in one year but provides a bulb or other means (surviving winter).
- ps. udapogamy (sī dāpōg'āmī psāl-) n. [Gk. *pseudes* false; *apo* way *gamos* marriage.] Fusion of pair of vegetative nuclei, as in certain fungi and in fern prothallia.
- pseudoposematic (sīdāp'ōsēmātīk, psāl-) a. [Gk. *pseudes* false *apo* from; *sema*, sign.] Imitating warning coloration or other protective features of harmful animals.
- pseudospory (sī'dāpōs pōrī psāl-) n. [Gk. *pseudes* false *apo* way *spheros* seed.] Spore formation without karyosis, the gametophyte originating from a diploid spore.
- pseudaxis (sīdāk'sis, psāl-) n. [Gk. *pseudes* false *axis* axis.] An apparent main axis sympodium.
- ps. udeplematic (sīdēp'īsēmātīk, psāl-) a. [Gk. *pseudes* false *epi* upon *sema*, sign.] Having displaying alluring coloration markings.
- pseudhaemal (sīdēh'māl, psāl-) a. [Gk. *pseudes* false *haima*, blood.] *Appl* the vascular system of certain worms and echinoderms.
- pseudholopti (sī dhōlōp'tīk, psāl-) a. [Gk. *pseudes* false *holos* whole *optikos* relating to sight.] Intermediate between holoptic and dichoptic, condenses in eyes of Diptera.
- pseudimago (sī dīmāgō psāl-) n. [Gk. *pseudes* false L. *imago* image.] Stage between pupa and imago in metamorphosis of certain insects subimago.
- pseudocavicular (sī dhāl vēllār psāl-) a. [Gk. *pseudes* false L. *cavus* hollow.] *Appl* structure of cytoplasm containing starch grains or deutoplasm spheres.
- pseudoposematic, —see pseudoposematic.
- pseudoaquatic (sī dōlkwātīk, psāl-) a. [Gk. *pseudes* false L. *aquas* water.] Thriving in moist ground.

**pseudoblepharoplast** (sū dōblē'f'ar-  
plāst pē) = [Gk. *pseudos* false  
*blepharion* eyelash *plaster* formed.]  
Temporary concentration of chro-  
matin near centriole in spermi-  
formation of certain insects.

**pseudobranchium** (sū dōbrā'kiām  
pē) = [Gk. *pseudos* false  
*brachion* arm.] Appendage for  
locomotion on a substratum formed  
from elongated pterygial of pectoral  
fin of Pediculates

**pseudobranch** (sū dōbrāngk' pē) =  
= [Gk. *pseudos* false; *branchia*  
gill.] An accessory gill of some  
fishes, not respiratory in function  
spiracular or vestigial hyoidian gill.

**pseudobulb** (sū dōbēlb' pē) =  
[Gk. *pseudos* false L. *bulbus*  
bulb.] A thickened internode of  
orchids, for storage of water and  
reserves.

**pseudobulbil** (sū dōbēlb'bil pē) =  
[Gk. *pseudos* false L. *bulbus*  
bulb.] An outgrowth of some ferns,  
substitute for sporangia.

**pseudobulbons** (sū dōbēlb'ōn, pē) =  
= [Gk. *pseudos* false L. *bulbus*  
bulb.] Adapted to xerophytic con-  
ditions through development of  
pseudobulbs

**pseudocarp** (sū dōkār' pē) =  
[Gk. *pseudos* false *carpos* fruit.]  
A false fruit, one in which other  
parts than ovary assist in formation

**pseudocellus** (sū dōsēl'ē, pē) =  
[Gk. *pseudos* false L. *ocellus*  
little eye.] One of scattered sense  
organs of unknown function in  
certain insects.

**pseudocentrum** (sū dōsēn'trūm pē) =  
= [Gk. *pseudos* false L. *centrum*  
centre.] Appl. vertebrae composed  
of two pairs of arcualia meeting and  
forming a sut. re laterally

**pseudochromatidia**, —prochromatin.

**pseudocilia** (sū dōsēl'ia, pē) = *pē*h  
[Gk. *pseudos* false L. *cilium*  
eyelid.] Protoplasmic threads  
projecting from cell through sut  
rounding sheath of mucilage as in  
Tetrasporaceae

**pseudocoel** (sū dōsēl' pē) = [Gk.  
*pseudos* false *coelus* hollow]

The narrow cavity between the two  
laminae of septum lucidum so-  
called fifth ventricle of brain.

**pseudocoanch** (sū dōkōngk' pē) =  
[Gk. *pseudos* false *coanchē* shell.]  
A structure developed above and  
behind the true coancha in croco-  
diles.

**pseudocone** (sū dōkēn pē) = [Gk.  
*pseudos* false *cone*] Appl.  
Insect compound eye having cone  
cells filled with transparent gela-  
tinous material.

**pseudocojugation** (sū dōkōnjōgā  
shūn, pē) = [Gk. *pseudos* false  
L. *yoke*, with *syn-* yoke.] Con-  
jugation of Sporozoa in which two  
individuals, temporarily and with-  
out true fusion, join end to end,  
protomerites to deutomerites, or side  
to side

**pseudocostal** (sū dōkōs'tāl, pē) =  
[Gk. *pseudos* false L. *costa* rib.]  
False-veined, having a marginal  
vein uniting all others.

**pseudoculus** (sū dōk'ūlūs) = [Gk.  
*pseudos* false L. *oculus* eye.] An  
oval area on each side of head of  
Psoropoda, possibly a receptor for  
mechanical vibrations

**pseudocyst** (sū dōkēst pē) = [Gk.  
*pseudos* false *kystis* bladder.] A  
residual protoplasmic mass which  
swells and ruptures, liberating  
spores of Sporozoa.

**pseudodeltidium** (sū dōdēl'id'īūm  
pē) = [Gk. *pseudos* false Δ.  
*deltā* *down* of *me*] A plate partly  
or entirely closing deltidial fissure in  
ventral valve of certain Testi-  
cardines

**pseudoderis** (sū dōdērm, pē) =  
[Gk. *pseudos* false *dermis* skin.]  
A kind of covering or skin of certain  
compact sponges, formed also  
towards pseudogastric cavity

**pseudodont** (sū dōdōnt' pē) =  
[Gk. *pseudos* false *odōn* tooth.]  
Having false or horny teeth, as  
monotremes

**pseudofollicious** (sū dōfōl'l'ishūs,  
pē) = [Gk. *pseudos* false; L.  
*folium* leaf.] With expansions  
resembling leaves

**pseudogamy** (sū dōg'āmī pū-) *n*. [Gk. *pseudes* false *gamos* marriage.] Union of hyphae from different thalli; activation of ovum by spermatozoon which plays no part thereafter pseudomixis.

**pseudogaster** (sū dōgās'tēr pū-) *n*. [Gk. *pseudes* false *gaster* stomach.] An apparent gastric cavity of certain sponges, opening to exterior by pseudo-oculum and having true oscula opening into itself.

**pseudogastrula** (sū dōgās'troolā, pū-) *n*. [Gk. *pseudes* false *gaster* stomach.] The stage of Sycon development when archaeocytes become completely enclosed by flagellate cells.

**ps dogyne** (sū dōgāt, pū-) *n*. [Gk. *pseudes* false *gyne* female.] A worker ant with female thoracic characters.

**pseudoheart**, — the axial organ of echinoderms one of the contractile vessels pumping blood from dorsal to ventral vessel in annelids.

**pseudolamina** (sū dōlām'mā, pū-) *n*. [Gk. *pseudes* false *L. lamina*, plate.] Expanded pical portion of phylode.

**ps domanubrium** (sū dōmānū brīum, pū-) *n*. [Gk. *pseudes* false *L. manubrium*, handle.] The manubrium considered as a process of subumbrella where the former contains the gastric cavity in certain Trachylinae.

**ps id metamerism** (sū'dōmēt'ām- ēritm, pū-) *n*. [Gk. *pseudes* false *metas*, after *meros* part.] Apparent serial segmentation an approximation to metamerism, as in certain flat worms.

**pseud mitoti** (sū dōmītō'tik, pū-) *n*. [Gk. *pseudes* false *mitos* thread.] Dimeristic, *q.s*

**pseud mixis** (sū dōmīk'sis, pū-) *n*. [Gk. *pseudes* false; *mixis* mingling.] A form of nuclear fusion, not regularly sexual, leading to embryo formation; pseudogamy somatogamy

**pseud monocarpous** (sū dōmōdō-kārpūs, pū-) *n*. [Gk. *pseudes* false *monos* alone *karpos* fruit.] With seeds retained in leaf-bases until liberated, as in cycads.

**pse domonocotyledonous** (sū dō-mōn'ōkōtēlēs dōnūs, pū-) *n*. [Gk. *pseudes* false *monos* alone; *hōtyledon*, cup-like hollow.] With two cotyledons coalescing to appear as one.

**pseudomo ocyelic** (sū dōmōn'ōelīk' līk, pū-) *n*. [Gk. *pseudes* false, *monos* alone; *hōtylos* circle.] Appl. crinoids with infrabranial absent in adults but present in young or in near ancestors.

**pse donavocella** (sū dōnāvōtēlā, pū-) *n*. [Gk. *pseudes* false *L. navicella*, small boat.] A small boat shaped spore containing sporozoites, in Sporozoa.

**pse donotum** (sū dōnō'tūm, pū-) *n*. [Gk. *pseudes* false *notos*, back.] Postnotum or postcutellum.

**pseudon cleis**, — *paranocleis q.s*

**pse d n cleoli** (sū'dōnōkīl'ōlī, pū-) *n. pl.* [Gk. *pseudes* false *L. nucleus* kernel.] Knots or granules in nuclear reticulum not true nucleoli.

**ps donychium** (sū dōnīk'tūm, pū-) *n*. [Gk. *pseudes* false *onyx*, claw.] A lobe or process between claws of insects.

**pseudo-oculum** (sū dōōs'ōkūlūm, pū-) *n*. [Gk. *pseudes* false *L. oscheum* small mouth.] The exterior opening of pseudogaster.

**pseud parenchyma** (sū'dōpārēng' kīmā, pū-) *n*. [Gk. *pseudes* false *paros*, beside *enchyma*, infusion.] A tissue-like collection of hyphae resembling parenchyma.

**pseudopenis** (sū dōpēr'nīs, pū-) *n*. [Gk. *pseudes* false *L. penis* penis.] The protruded evaginated portion of male deferent duct, in certain Oligochaeta.

**pseud periculum** (sū'dōpēr'kūlūm, pū-) *n*. [Gk. *pseudes* false; *L. operculum* lid.] A structure resembling an operculum or closing membrane.

- pseudoperianth** (sū dōpēr'lānth, psū) *n.* [Gk. *pseudes* false *peri* round *anthes* flower] An archogonium-investing envelope of certain liverworts.
- pseudoperidium** (sū dōpērīd'tūm psū) *n.* [Gk. *pseudes* false *peridium* small wallet.] The acediospore envelope of certain fungi.
- pseudoplasmodium** (sū dōpōplāzmō dīūm, psū) *n.* [Gk. *pseudes* false *plasma* form.] An aggregation of amoebulae without fusion of their protoplasm.
- pseudopod** (sū dōpōd, psū) *n.* [Gk. *pseudes* false *pus* foot.] A foot-like body-wall process of certain larvae a pseudopodium *q.v.*
- pseudopodiospore** (sū dōpō diospōr psū) *n.* [Gk. *pseudes* false *pus* foot *speros* seed.] An amoebula or amoeboid swarm-spore which moves by means of pseudopodia.
- pseudopodium** (sū dōpō dīūm, psū) *n.* [Gk. *pseudes* false *pus* foot *eidos* form.] A blunt protrusion of ectoplasm serving for locomotion and prehension in protozoa. In certain mosses the sporogonium-supporting pedicel pseudopod.
- pseudopore** (sū dōpō psū) *n.* [Gk. *pseudes* false *poros* channel] A small orifice between outermost tube and intercanal system of certain sponges.
- pseudopregnancy** (sū dōp'rēg nāns psū) *n.* [Gk. *pseudes* false *L. par* before *gignere* to beget.] Condition of development of accessory reproductive organs simulating true pregnancy although fertilization has not taken place.
- pseudopupa** (sū dōpō psū) *n.* [Gk. *pseudes* false *L. pupa* pupa.] The semi-pupa or coarctate stage of certain insect larvae.
- pseudoramosa** (sū dōrēl mōs, psū) [Gk. *pseudes* false *L. ramus* branch.] H. vine false branches.
- pseudoramus** (sū dōrēm ūlīs psū) *n.* [Gk. *pseudes* false *L. ramulus* small branch.] A spurious branch of certain algae.
- pseudoraph** (sū dōrā fē, psū) *n.* [Gk. *pseudes* false *raphis* seam.] A smooth axial area in some diatoms.
- pseudo-reducti** *n.*—the preliminary division of chromatin rods preceding formation of tetrads and actual reduction in maturation.
- pseudorhabdites** (sū dōrāb dīts, psū) *n. plu.* [Gk. *pseudes* false *rhabdus* rod.] Granular masses of formed secretion produced by gland cells of Rhabdocoelidia.
- pseudosacral** (sū dōsā'krāl psū) [Gk. *pseudes* false *L. sacer* sacred.] *Appl.* sacral vertebra attached to pelvis by transverse process and not by sacral rib.
- pseudoscolex** (sū dōsō'sōlēks, psū) *n.* [Gk. *pseudes* false *scolex* worm.] Modified anterior proglottides of certain cestodes where true scolex is absent.
- pseudosematic** (sū dōsēmāt'ik, psū) *a.* [Gk. *pseudes* false *sema*, sign.] H. vine false coloration or markings, as in protective mimicry or for alluring aggressive purposes.
- pseudoseptate** (sū dōsēp'tāt, psū) *a.* [Gk. *pseudes* false *L. septum* division.] Apparently but not morphologically septate.
- pseudoseptum** (sū dōsēp'tūm psū) *n.* [Gk. *pseudes* false *L. septum* partition] A perforated or incomplete septum septum with pores as in certain fungi.
- pseudosestil** (sū dōsēs'til psū) *a.* [Gk. *pseudes* false *L. ordere* to sit.] *Appl.* abdomen of petiolat insects when petiole is so short that abdomen is close to thorax.
- pseudosperm** (sū dōspēr'm, psū) *n.* [Gk. *pseudes* false *sperma* seed.] A false seed or carpel.
- pseudospore** (sū dōspōr psū) *n.* [Gk. *pseudes* false *speros* seed.] A teliospore or winter-spore of Rusts.
- pseudostel** (sū dōstēl psū) *n.* [Gk. *pseudes* false *stela* pillar] An apparently stelar structure as midrib of leaf.

**pse dostipula** (sū dōstip'ālā, psū) *n.* [Gk. *psuedes* false L. *stipula* small stalk.] Part of lamina at base of leaf-stalk, which resembles stipule.

**pseudostoma** (sū dōstō'mā, psū-) *n.* [Gk. *psuedes* false L. *stoma* mouth.] A temporary mouth or mouth-like opening. pseudo-oculum.

**pse dostrachea** (sū'dōstrā'kēā, psū-) *n.* [Gk. *psuedes* false L. *trachea* windpipe.] A trachea-like channel.

**pseudovari** m (sū dōvā'rīūm, psū) *n.* [Gk. *psuedes* false L. *ovarium* ovary] Ovary producing pseudova.

**pseudovelum** (sū dōvē'lūm, psū-) *n.* [Gk. *psuedes* false L. *velum* covering veil.] A lum without muscular and nervous cells in Scyphozoa.

**pseudovital** (sū'dōvītāl'itā, psū) *n.* [Gk. *psuedes* false L. *vitellus* egg yolk.] A cellular double string structure of Aphididae, supposed substitute for Malpighian tubes.

**pse dovum** (sūdō'vīūm, psū-) *n.* [Gk. *psuedes* false L. *ovum* egg] An ovum that can develop without fertilization. parthenogenetic ovum the earlier condition of viviparously-produced Aphididae.

**pse dozoaea** (ū dōzō'ēā, psū) *n.* [Gk. *psuedes* false *zoön*, animal.] A larval stage of stomatopods so-called from its resemblance to zoaea stage of decapoda.

**psoas** (sō'sā, psō'sā) *n.* [Gk. *psaos* loin.] Name of two loin muscles major and minor.

**pseosperrma** (sō rōspēr'mā, psō') *n.* *plu* [Gk. *psora*, itch L. *sperma*, seed.] The resistant encysted stages of Sporozoa minute parasitic organisms generally.

**psychogenetic** (sī'kōjēnēt'ik) *a.* [Gk. *psyche* soul L. *genesis* descent.] Pert mental development caused by the mind. *f* mental origin psychogenic.

**psychon** (sī'kōn, psē) *n.* [Gk. *psyche* mind.] Synapse during passage of impulse from one nerve cell to the next.

**psychophysical** (sī'kōfī'zīks) *n.* [Gk. *psyche* mind L. *physikos* physical.] The study of qualitative and quantitative relations between physical stimuli and sensations.

**psychophysiology** (sī'kōfīzīōl'ōjī) *n.* [Gk. *psyche* mind L. *physis* nature; *logos* discourse.] Physiology in relation to mental processes.

**psychosomatic** (sī'kōsōmāt'ik) *a.* [Gk. *psyche* mind L. *soma* body] Pert relationship between mind and body. *part* or having body reactions to mental stimuli.

**Psych oic** (sī'kōsō'ik) *a.* [Gk. *psyche* mind L. *zoön* animal.] Pert or *appl* geological era in which Man predominates.

**psychrophil** (sī'krōfīl psī-) *a.* [Gk. *psychros* cold L. *philein*, to love.] Thriving at relatively low temperatures, at below 20 C., *appl* certain bacteria psychrophilic. *n.* Psychrophile.

**psychrophyt** (sī'krōfīl, psī-) *n.* [Gk. *psychros* cold L. *phyton* plant.] A plant which grows on cold substratum.

**pteralia** (tērālīā, ptēr) *n. plu.* [Gk. *pteron*, wing] Axillary sclerites forming articulation of wing in insects.

**pterergate** (tērēr gāt, ptēr) *n.* [Gk. *pteron* wing L. *ergates* worker.] A worker or a soldier ant with vestigial wings.

**pteridology** (tērīdōl'ōjī ptēr) *n.* [Gk. *pteron* fern L. *logos* discourse.] The branch of botany dealing with ferns.

**pteridophyte** (tērīdōfīt ptēr) *n.* [Gk. *pteron* fern L. *phyton* plant.] A vascular cryptogam, any of the ferns, club-mosses or horsetails.

**pterina** (tēr'īnā, ptēr) *n. plu.* [Gk. *pteron* wing] Wing pigments of certain butterflies, related chemically to uric acid.

**pterion** (tēr'īōn, ptēr) [Gk. *pteron*, wing] The point of junction of parietal frontal, and great wing of sphenoid *appl* ossicle sutural bone.



pt rocardiac (tēr'okār dīāk ptēr) *a* [Gk. *pteron*, wing *hardia* stomach] *Appl* ossicles with curved ends in gastric mill of Crustacea.

pterocarpous (tēr'okār'pūs, ptēr) *a*. [Gk. *pteron*, wing *karpos* fruit.] With winged fruit.

pterodilum (tērō dīūm ptēr) *n* [Gk. *pteron* wing] A winged fruit samara.

pteroid (tērōd ptēr) *a* [Gk. *pteron*, wing *ptēris* fern *eidos* form.] Resembling a wing like fern.

pt pa des (tēr'opē'dēs, ptēr) *n*. *phē*. [Gk. *pteron* wing *phais* child.] Birds abt to fly when ewly hatched.

pter pegum (tēr'opē'gūm, ptē) *n* [Gk. *pteron* wing *peg* source.] An insect wing socket

pteropt urit (tēr'ōploō rīt, ptē) *n* [Gk. *pteron* wing *pterus* and] Thoracic sclerit between wing mesoth and mesopleurite in Diptera.

pteropodial (tēr'ōpō dīāl, ptēr) *a*. [Gk. *pteron* wing *podus* foot.] *Appl* wing-like lobes of mid foot of Pteropoda or sea butterflies.

pteropodium (tēr'ōpō dīūm, ptēr) *n*. [Gk. *pteron* wing *podus* foot.] A winged foot, as of certain bats.

pterospermous (tēr'ōpēr'mūs, ptēr) *a*. [Gk. *pteron* wing *sperma* seed.] With winged seeds.

ptero stigma (tēr'ōstīg'mā, ptēr) *n* [Gk. *pteron* wing *stigma*, mark.] An opaque cell on insect wings.

pterotheca (tēr'ōthē'kā, ptēr) *n*. [Gk. *pteron*, wing *thēke* case] The wing-case of pupae.

pteroptic (tērō'tīk, ptēr) *n*. [Gk. *pteron* wing *ous* ear] A cranial bone overlying horizontal semicircular canal of ear. *Appl* bone between prootic and eptotic.

pteryogl tamic acid — stamin M or folic acid *q*.

pterygial (tērj'īāl, ptēr) *a*. [Gk. *pteryx* wing] *Part* wing or fin *appl* a bone pporting a fin-ray *part* a pterygium

pt rygi phor (tērj'ībōr ptēr) *n*. [Gk. *pterygion*, little wing; *pherein* to bear] One of the cartilaginous fin rays an actinost, *q*.

pt rygi m (tērj'ītūm ptēr) *n*. [Gk. *pterygion* littl wing] A prothoracic process of weevils a small lobe on base of under wings in Lepidoptera vertebrate limb

pterygobranchiate (tēr'īgōbrāng' kīāt ptēr) *a*. [Gk. *pteryx* wing *branchia*, gills.] H wing spreading feathery gills as certain Crustacea.

pterygoda (tēr'īgōdā, ptēr) *n* *phē* [Gk. *pteryx* wing *eidos* form.] Th tegulae of an insect.

pteryg id (tēr'īgoid ptēr) *n* [Gk. *pteryx* wing *eidos* form.] A cranial bone. *a*. Wing-like *appl* wing like processes of sphenoid, canal, fissure, fovea, plexus muscles.

pterygoideus,—externus and internus muscles causing protrusion and raising of mandible

pterygomandibular (tēr'īgōmāndīb ūlār ptēr) *a*. [Gk. *pteryx* wing L. *mandibulum* jaw] *Part* pterygold and mandible *appl* a tendinous band or raphe of buccopharyngeal muscle.

pterygomaxillary (tēr'īgōmāksīl'ārī, ptēr) *a*. [Gk. *pteryx* wing L. *maxilla* jaw] *Appl* fissure between maxilla and pterygold process of sphenoid.

pt rygopal tine (tēr'īgōpāl'īnīn, ptēr) *a*. [Gk. *pteryx* wing L. *palatus* palate.] *Part* region of pterygoid and palatal cranial bones *appl* canal fovea, groove pterygo-palatal.

pt rygophore — pterygophore *q*.

pt rygopodial (tēr'īgōpō dīāl ptēr) *a*. [Gk. *pteryx* wing *podus* foot.] *Appl* mucous glands associated with claspers in elasmobranchs.

pterygoquadrate (tēr'īgōkwōd rāt, ptēr) *a*. [Gk. *pteryx* wing; L. *quadratus* squared.] *Appl* cartilage constituting dorsal half of mandibular arch of certain fishes.

**pterygospinous** (tēr'igōsp'ns pter) *a.* [Gk. *pteryx* wing L. *spina* spine.] *Appl.* ligament between lateral pterygoid plate and spinous process of sphenoid.

**pteryla** (tēr'ile pter) *n.* *plu* [Gk. *pteron*, feather *lyle* a wood.] A bird feather-tract, skin areas on which feathers grow; *opp.* apteria.

**pterylosis** (tēr'ilo'sis, pter) *n.* [Gk. *pteron*, feather *lyle* a wood.] Arrangement of pterylas and pteria in birds.

**ptilinum** (tīl'nūm ptil-) *n.* [Gk. *ptilon* feather] A head-vesicle or bladder-like expansion of head of fly emerging from pupa.

**ptilopa di** (tīlopē'dik ptil-) [Gk. *ptilon* feather *paio* child.] Covered with down when hatched.

**ptilosis,—pterylosis.**

**ptyalin** (tī'alin pti-) *n.* [Gk. *ptyalon* saliva.] The starch-digesting enzyme i saliva, salivary amylase.

**ptyxis** (tik'sis, pti'xis) *n.* [Gk. *ptyxis* fold.] The form in which young leaves are folded or rolled on themselves in the bud.

**puberty** (pū'bērti) *n.* [L. *pubertas* adult state] Beginning of sexual maturity.

**pubescent** (pūbēr'sēnt) *a.* [L. *pubes* adult.] Covered with down or fine hair.

**pubes** (pūbēs) *n.* [L. *pubes* adult.] The pubic region.

**pubesce** ce (pū'bēs'ēnt) *n.* [L. *pubescere* to become mature] Downy or hairy covering on some plants and certain insects.

**pubescent** (pūbēs'ēnt) *a.* [L. *pubescere* to become mature.] Covered with soft hair or down.

**pubic** (pū'bik) *a.* [L. *pubes* mature.] In region of pubes *appl.* arch, ligament, symphysis, tubercle, vein.

**pubi** (pū'bīs) *n.* [L. *pubes* mature] Anterior part of hip-bone consisting of body and ramus antero-ventral portion of pelvic girdle as pubis.

**pubendal** (pū'dēn dāl) *a.* [L. *puber* to be ashamed.] In region of pudendum *appl.* artery cleft, nerve veins pudic

**pudendum** (pū'dēn dūm) [L. *puber* to be ashamed.] Vulva or external female genitalia.

**pudic,—pubendal.**

**putting**—ejection of cloud of spores from ripe ascocarp or pothecium.

**pululation** (pūl'ūlā'shən) *n.* [L. *pullulare* to sprout] Gemination reproduction by vegetative budding as in yeast cells.

**pulm branchia** (pūl mōbrāng'kiā) *n.* [L. *pulmo* lung; Gk. *branchia* gills.] A gill-like organ adapted to air-breathing conditions lung book, as of spiders.

**pulmogastric** (pūl mōgās'trik) *a.* [L. *pulmo* lung Gk. *gaster* stomach.] Pert. lungs and stomach.

**pulmonary** (pūl mōnār'i) *a.* [L. *pulmo* lung] Pert. lungs *appl.* artery ligament, valves veins, pleura, etc.

**pulmonary cavity or sac,—the mantle-cavity of molluscs without ctenidia.**

**pulmones** (pūlmō'nēz) *n.* *plu* [L. *pulmo* lung] Lungs.

**pulp** (pūlp) *n.* [L. *pulpā*, fruit pulp] Soft, fleshy part of fruit the dental papilla soft mass of splenic tissue mesodermal core of feather cylinder

**pulsating vacuole,—contractile vacuole**

**pulse** (pūls) *n.* [L. *pulsus* driven.] The beat throbb observable in arteries, due to action of heart. [O F *puls* from L. *puls* pottage.] A legume leguminous plant.

**pulse wave**—a wave of increased pressure over arterial system, started by ventricular systole.

**pulsillum** (pūlsēl'ūm) *n.* [L. *pulsare* to beat.] A flagellum situated at posterior end of protozoan body

**pulvillar** (pūlvil'ār) *a.* [L. *pulvillus* small cushion.] Pert. or at pulvillus.

**pulvilliform** (pūlvil'fōrm) *a.* [L. *pulvillus* small cushion *forma*, shape] Lik small cushion.

**pulvillus** (pŭlvīl ūs) *n.* [*L. pulvillus* small cushion.] Pad process, or membrane on foot or between claws, sometimes serving as adhesive organ, in insects lobe beneath each claw

**pulvinar** (pŭlvī'nār) *n.* [*L. pulvinar* cushion.] An angular prominence on thalamus. *a.* Cushion-like part *a.* pulvinos.

**pulvinate** (pŭlvī'nāt) *a.* [*L. pulvinatus* cushion.] Cushion-like having pulvinos.

**pulvifid** (pŭlvī'foid) *a.* [*L. pulvifidus* cushion Gk. *eider* form] Resembling a pulvillus *appl.* modified petiole

**pulvinulus** (pŭlvīn ūlŭs) *n.* [*L. p. / sicut* cushion.] A pulvillus.

**pulvinus** (pŭlvī'nŭs) *n.* [*L. pulvinus* cushion.] A cellular swelling at junction of axis and leaf stalk.

**pulvipilume** (pŭlvī'ploom) *n.* [*L. pulvis* powder *plume*, feather] A powder-down feather

**punctate** (pŭng'ktāt) *a.* [*L. punctum* point.] Dotted having surface covered with small holes or dots having a dot-like appearance

**punctulat** (pŭng'ktŭlāt) *a.* [*L. dim. of punctum* point.] Covered with very small dots or holes.

**punctum** (pŭng'ktŭm) *n.* [*L. punctum*, point.] A minute dot, point, or orifice as puncta lacrimalia, puncta vasculosa pex of growing point punctum vegetationis.

**punctur** (pŭng'ktŭr) [*L. punctura* prick.] A small round surface depression.

**pupa** (pŭ pā) *n.* [*L. pupa*, puppet.] The third chrysalis stage of insect life insect enclosed in case of ring stage in metamorphosis preceding imago embryo with series of transverse rings of filia, in Holothuria.

**pupal** (pŭ pāl) *a.* [*L. pupa* puppet] Pert pupa

**puparium** (pŭpā rīŭm) *n.* [*L. pupa* puppet.] The casing of pupa

ovate pupa pupal instar exemplified in blow fly

**pupat** (pŭpāt) *v.* [*L. pupa* puppet.] To pass into the pupal stage.

**pupiform** (pŭ pīfŕm) *a.* [*L. pupa*, puppet *forma* shape.] Pupa shaped pupa-like.

**pupigerous** (pŭpīj ŕŕŭs) *a.* [*L. pupa*, puppet *gerere* to bear] Containing pupa.

**pupil** (pŭ pŭ) *n.* [*L. pupilla*, pupil of eye.] Aperture of iris through which rays pass retina central spot of an ocellus.

**pupillary** (pŭ pīlārī pŭpī'ārī) *a.* [*L. pupilla* pupil of eye.] Pert pupil of eye *appl.* a membrane.

**pupiparous** (pŭpīp'ārŭs) *a.* [*L. pupa* puppet *parere* to beget.] Bringing forth young already developed to the pupa stage as certain parasitic insects.

**purines** (pŭ rīnz) *n. pl.* [*Gk. pyron* nucleus.] Basic substances containing carbon, hydrogen, and nitrogen, as adenine and guanine occurring during metabolism.

**Purkinje** (/ E Purkinje Bohemian physiologist) cells of,—an incomplete stratum of flask-shaped cells between the molecular and uclear layers of cerebellar cortex.

**pustule** (pŭstŭl) *n.* [*L. pustula* pimple] A blister-like prominence

**pustul** (pŭ ū) [*L. pustula* blister] Non-contractile vacuole containing watery fluid filling or emptying by duct, found in many Dinoflagellata contractile vacuole in some protophytes.

**putamen** (pŭtā mēn) *n.* [*L. putamen* nutshell.] The hard endocarp or stone of some fruits lateral part of lentiform nucleus of cerebrum; hell membrane of bird egg

**pycni** (pīk'nīk) *a.* [*Gk. pyknes* thick.] Thick-set *appl.* type of body build short, stocky with broad face and broad also pyknic.

**pycnid** —pycnidium  
**pycnidia**, —pl of pycnidium.

**pycnidlophore** (pīknīd'fōfōr) *n.* [Gk. *pyknao* *dense idion, dim pherein* to bear.] A conidiophore producing pycnidia.

**pycnidiospore** (pīknīd'fōspūr) *n.* [Gk. *pyknao* *dense idion, dim spora* seed.] The spore produced by pycnidia.

**pycnidium** (pīknīd'fōm) *n.* [Gk. *pyknao* *dense idion, dim.*] A small flask-shaped organ or sporogonium containing slender filaments which form pycnidiospores or spermatia by abstriction. In life-history of wheat rust; receptacle for stylospores in fungi and lichens.

**pycnogonidium**, **pycnogonidium**, —**pycnidiospore** *q.v.*

**pycnoplasma** (pīknōplās'm) *n.* [Gk. *pyknao* *dense phlein*, to mould.] An unexpanded form of plasmon.

**pycnosis** (pīknō'sis) *n.* [Gk. *pyknao* *condensation.*] Cell-degeneration; formation of intensely staining clump of chromosomes; thickening of thallus, as in certain Ascomycetes also *pyk* *sona*.

**pycnospore**, —**pycnidiospore** *q.v.*

**pycnosis** (pīknō'tik) *n.* [Gk. *pyknao* *condensation.*] Characterised by or *part.* **pycnosis** *appl.* small irregular nucleus of degenerated cells also *pyknotic*.

**pycnosyll** (pīknō'sil) *n.* [Gk. *pyknao* *dense; xylon* wood.] Having compact wood. *Appl.* *manoxyl*.

**pyral** (pī'gīl) *n.* [Gk. *pyge* rump.] Situated at or *part.* posterior end of back *appl.* certain plates of chelonian carapace.

**pygidial** (pī'jīd'fōl) *n.* [Gk. *pygidion* narrow rump.] *Part.* **pygidium**; *appl.* paired repugnatorial glands in certain beetles.

**pygidium** (pī'jīd'fōm) *n.* [Gk. *pygidion*, narrow rump.] A caudal shield covering abdomen of certain arthropods; terminal covered abdominal segment of a beetle; compound terminal segment of a

scal insect sensory dorsal plate of 11th abdominal segment of fleas anal segment of annelids.

**pygochord** (pī'gōkōrd) *n.* [Gk. *pyge* rump *chorda* cord.] A ventral median ridge-like outgrowth of intestinal epithelium in certain Enteroptera.

**pygostyle** (pī'gōstīl) *n.* [Gk. *pyge* rump *stylas* column.] An p-turned compressed bone at end of vertebral column of birds, formed by fusion of hindmost vertebrae.

**pykn-** —*see* **pyco-**

**pylangium** (pīlā'jōm) *n.* [Gk. *pylo* gate *angion* vessel.] Proximal portion of a truncus arteriosus.

**pylocyt** (pī'lōsīt) *n.* [Gk. *pylon* gateway *kyto* hollow.] A pore-cell at inner end of small funnel-shaped depression the porocyte of certain sponges.

**pyl** (pī'lōm) *n.* [Gk. *pylon* gate.] 1 certain Sarcodina, an aperture for emission of pseudopodia and reception of food.

**pylori** (pīlō'rīk) *n.* [Gk. *pyloros* gate-keeper.] *Part.* or in region of pylorus *appl.* artery antrum glands, orifice, valve, vein *appl.* sphincter between mid-gut and hind-gut, 1 insects.

**pylorus** (pīlō rūs) *n.* [Gk. *pyloros* gate-keeper.] Lower orifice of stomach, communicating with duodenum.

**pyramid** (pī'rā'mīd) *n.* [L. *pyramus* pyramid.] A conical structure protuberance, eminence, as 1 cerebellum, medulla oblongata, temporal bone, entubule, kidney pyramidal cell of cerebral cortex 1 piece of the dental apparatus 1 echinocoda.

**pyramidal** (pī'rā'mīd'fōl) *n.* [L. *pyramus* pyramid.] Conical like pyramid *appl.* leaves, carpal bone, brain cells, tract, lobes, processes, muscles.

**pyre** (pī'rēn) *n.* [Gk. *pyren* fruit stone.] A fruit-stone or kernel putamen.

**pyren** (pī'rē'n) *n.* [Gk. *pyren* fruit-stone.] The substance of true nucleolus, paranuclein.

**pyrenocarp** (pī'ēnōkārp) *n* [Gk. *pyren* fruit-stone *karpos* fruit.] A form of **sarcocarp** a fleshy fruit with stone or hard kernel drupaceous fruit

**pyrenoid** (pīrē'nōid) *n* [Gk. *pyren* fruit-stone *side* form.] A colourless plastid of lower plants a centre of starch formation *a* Nucleiform.

**pyrenophore** (pīrē'nōfōr) *n* [Gk. *pyren* fruit-stone *phero* to bear] Part of cytoplasm which contains the nucleus.

**pyretic** (pīrē'tik) *a*. [Gk. *pyretos* fever] Increasing heat production causing rise in body temperature.

**pyridoxine**,—**vitamin B<sub>6</sub>**, rat anti dermatitis factor or adermisin.

**pyriform** (pīr'ifōrm) *a*. [L. *pyram* pear *forma* shape.] Pear-shaped *apple* *a* muscle, larval sensory organ in Bryozoa, an organ of larval molluscs ventral left calcule *a* ventralis of nautilus a type of silk gland in spiders etc *piriform* *g.s*

**pyxidate** (pīksid'it) *a* [Gk. *pyxis* box *diem* *diem*] Opening like box by transverse dehiscence *perit* or like a pyxidium or a pyxis.

**pyxidium** (pīksid'iūm) *n*. [Gk. *pyxis* box *diem* *diem*] A pyxis *a* a capsular fruit which dehisces transversely

**pyxis** (pīks'is) *n* [Gk. *pyxis* box.] A dilatation of podetium in lichens.

## Q

**Q-disc**,—**anisotropic A-disc** *g.s*

**quadrangular** (kwōdrāng'gūlār) *a* [L. *quadrangulus*] *Apple* lobes or lobules of cerebellar hemispheres connected by monticuli

**quadrat** (kwōd'rās) *n* [L. *quadratus* squared] The bone with which lower jaw articulates in birds, reptiles, amphibians and fishes ligament extending from annular ligament to neck of radius one of lobes of liver lobe of cerebrum th. *praeconus*

**quadratojugal** (kwōdrā'tōjoo'gūl) *n* [L. *quadratus* squared *jugum* yoke.] Membranous bone connecting quadrate and jugal bones; quadratomaxillary

**quadratomandibular** (kwōdrā'tō-māndīb'ūlār) *a* [L. *quadratus* squared *mandibula* jaw] Part quadrate and mandibulum.

**quadratomaxillary**,—**quadratojugal**. **quadratus** (kwōdrā'tūs) *n* [L. *quadratus* squared.] Name of several muscles *g* quadratus femoris.

**quadricarpellary** (kwōd'rīkār'pēllār) *a*. [L. *quattuor* four Gk. *karpos* fruit.] Containing four carpels.

**quadriceps** (kwōd'rīsep) *n* [L. *quattuor* four *caput* head.] Muscle in front of thigh, extending lower leg and divided into four portions *upper end*

**quadrifarious** (kwōd'rīfār'ūs) *a*. [L. *quadrifarius* fourfold.] In four rows *apple* leaves

**quadrifid** (kwōd'rīfid) *a*. [L. *quattuor* four *fendere* to cleave.] Deeply cleft into four parts

**quadrifoliate** (kwōd'rīfōl'iat) *a*. [L. *quattuor* four *folium* leaf] Four leaved *apple* compound palmate leaf with four leaflets arising at common point.

**quadrigenital** bodies — corpora quadrigenitalia, *g.s*

**quadrjugate** (kwōd'rījoo'gūl) *a*. [L. *quattuor* four *jugum* yoke.] *Apple* pinnate leaf having four pairs of leaflets

**quadrilobate** (kwōd'rīlō'bāt) *a* [L. *quattuor* four *lobus* lobe] Four lobed

**quadrilocular** (kwōd'rīlōk'ūlār) *a*. [L. *quattuor* four *loculus* compartment.] Having four loculi or chambers, as ovary or anthers of certain plants.

**quadrinaculat** (kwōd'rīnāk'ūlūs) *a* [L. *quattuor* four *macula* spot.] Having four spots.

**quadrinate**,—**quadrifoliate** *g.s* **quadriseptat** (kwōd'rīpēn'tāt) *a* [L. *quattuor* four *septa* wing] With four wings.



racemiferous (râstémf' rûs) *n.* [*L. racemus* bunch *ferre* to carry] Bearing racemes.

racemiform (râstémfôrm) *n.* [*L. racemus* bunch *forma*, shape.] I the form of raceme.

racemose (râstémô) *n.* [*L. racemus* bunch.] Bearing flowers in clusters *appl.* inflorescence with monopodial branching as racemes, spikes *appl.* glands with many branches whose shape suggests a raceme.

racemul (râstémûl) *n.* [*L. racemulus* small bunch.] A small raceme.

racemulose (râstémûlô) *n.* [*L. racemulus* small bunch.] I small clusters.

rachial (râ'kiâl) *n.* [*Gk. rachis* spine.] *Part* rachis rachial.

rachidial (râkîd'îâl) *n.* [*Gk. rachis* spine.] *Part* rachis.

rachidian (râkîd'îân) *n.* [*Gk. rachis* spine.] Placed at or near rachis *appl.* median tooth in row of teeth of radula.

rachiform (râ'kîfôrm) *n.* [*Gk. rachis* spine *L. forma* shape.] I the form of rachis.

rachilla (râkîl'îa) *n.* [*Gk. rachis* spine.] A small rachis axis f sp kelet, as in grasses.

rachiodo t (râkîdônt) *n.* [*Gk. rachis* spine *odon* tooth.] *Appl.* egg-eating snakes with well-developed hypophyses of anterior thoracic vertebrae, which function as teeth

sachiostrichous (râkîôst'îkûs) *n.* [*Gk. rachis* spine *stiche* row] Having a succession of somatids as axis f skeleton as in dipnoans.

rachis (râ'kis) *n.* [*Gk. rachis* spine] The spinal column the stalk or axis the shaft of feather median dorsal elevation f opisthocoma in trilobites rhachis

rachitomous (râkîtômûs) *n.* [*Gk. rachis* spine *temo* cut] Temnospondylous *g.*

radial (râ diâl) *n.* [*L. radius* ray] *Part* radius *part* ray of an echinoderm *appl.* plates supporting oral disc of crinoid *appl.* fibres sup-

porting retina *appl.* leaves or flowers growing out like rays from a centre. *n.* An endoskeletal support of fin in fishes.

radial notch,—lesser sigmoid cavity of coronoid process f ulna.

radial symmetry—arrangement of similar parts round a median vertical axis as in jellyfish.

radial (râdiâl) *n.* [*L. radius* ray] A carpal bone in line with radius.

radiate (râ diât) *n.* [*L. radius* ray] Radially symmetrical radiating *appl.* sternocostal ligaments stielate, *appl.* ligament connecting head of rib with two vertebrae and their intervertebral disc.

radiate-veined,—veined in a palmate manner

radiatiform (râ diât'îfôrm) *n.* [*L. radius* ray *forma*, shape.] With radiating marginal forets.

radical (râd'îkâl) *n.* [*L. radix* root.] Arising from root close to ground as basal leaves and peduncles.

radicant (râd'îkânt) *n.* [*L. radicans* to take root.] With roots developing from stem rooting

radicle (râd'îkûl) *n.* [*Dim. f L. radix* root.] A small root rootlet.

radicicolous,—radicolous.

radiciferous (râdîsîfô rûs) *n.* [*L. radix* root *ferre* flower] With flowers arising at extreme base of stem rhizanthous.

radiciform (râdîsîfôrm) *n.* [*L. radix* root *forma* shape.] Resembling root

radicivor (râd'îsîv' rûs) *n.* [*L. radix* root *vorare* t devour] Root-eating

radicl (râd'îkl) *n.* [*L. radix* root.] A small root primary root lower part of tegellum

radicolous (râdîk'îlûs) *n.* [*L. radix* root *colere* t inhabit] Inhabiting roots radicolous

radicos (râd'îkûs) *n.* [*L. radix* root.] With large root.

radicular (râdîk'îlâr) *n.* [*L. radix* root.] *Part.* radicle or radicle

radicul (râd'îkûl) *n.* [*L. radix* root.] A rootlet.

radicle (răd'ikl) *n* [*L. radix* root.] Having many rootlets.

radiocarpal (răd'ikl'pāl) *n* [*L. radius* ray *carpus* wrist.] *Part* radius and wrist.

radicle (răd'ikl) *n* [*L. radialis* small shuttle.] A spine of sea urchin.

radioreceptor (răd'ikl'rep'tōr) *n* [*L. radius* ray *receptor* receiver.] A terminal organ for receiving light, or temperature stimuli.

radioymmetrical (răd'ikl'met'rikāl) *n* [*L. radius* ray; *Gk. sym* with *metron*, measure.] Having similar parts similarly arranged round a central axis.

radioulna (răd'ikl'nā) *n* [*L. radi* ray *ulna* elbow.] Radius and ulna combined as a single bone.

radioulnar (răd'ikl'nār) *n* [*L. radius* ray *ulna* elbow.] *Part* radius and ulna.

radi (răd'ikl) *n* [*L. radius* ray.] A bone of arm or fore-limb between humerus and carpal, in some vertebrates fused with ulna. bar bone of feather. one of radial depressions or markings on fish scales. a plate of Aristotle's lantern. an insect wing-vein. radial area of disc in sea-anemones. ray of compass flower.

radix (răd'ikl) *n* [*L. radix* root.] A root. point of origin of structure, as of aorta.

radula (răd'ikl) *n* [*L. radere* to scrape.] A short and broad strip of membrane with longitudinal rows of chitinous teeth in mouth of most gastropods. of odontophore groove of liverworts.

radulate (răd'ikl'at) [*L. radere* to scrape.] Having radula or scraping organ. raduliferous.

raduliform (răd'ikl'fōrm) [*L. radere* to scrape *forma*, shape.] Like a radula or flexible file.

Rala y's corpuscles [G. Rala y, English morphologist]. Spores of Sarcocystis, an elongated sporozoan found in voluntary muscle fibres.

Ralsey's tube — elongated sacs found in substance of voluntary muscle which are adult stages of Dolichosporidia. Miescher's tubes.

ramal (ră māl) *n* [*L. ramus* branch.] Belonging to branches originating on a branch.

ramate (ră māt) *n* [*L. ramus* branch.] Branched.

ramellose (rām tīs) [*L. ramus* branch.] Having small branches.

ramentaceous (rām'entā'shūs) *n* [*L. ramentum* shavings.] Like a ramentum covered by ramenta.

ram stiferous (rām'entā'f'ētūs) *n* [*L. ramens*, shavings; *ferre* to carry.] Bearing ramenta.

ramentum (rām'entūm) *n* [*L. ramens* shavings.] One of brown scale-like structures found on fern leaves. *plu* ramenta, elongated membranous hairs epidermal outgrowths.

ramous (rām'ētūs) *n* [*L. ramus* branch.] Branched. *part* a branch.

rami, *pl* of ramus.

rami communicantes, — nerve fibres connecting sympathetic ganglia and spinal nerves.

ramicorn (rām'ikōrn) *n* [*L. ramus* branch *cornu*, horn.] Having branched antennae, as some insects.

ramiferous (rām'if'ētūs) [*L. ramus* branch *ferre* to bear.] Branched.

ramification (rām'if'ikā'shōn) *n* [*L. ramus* branch *facere* to make.] Branching. a branch of a tree, nerve, artery etc.

ramiflorous (rām'iflō'rūs) *n* [*L. ramus* branch *flor* flower.] Having flowers on branches.

ramiform (rām'ifōrm) *n* [*L. ramus* branch *forma*, shape.] Branch-like.

ramigeros (rām'if'ētūs) *n* [*L. ramus* branch *gerere* to carry.] Bearing branches.

ramiparous (rām'ip'ārūs) *n* [*L. ramus* branch *parere* to beget.] Producing branches.

ramose (rām'ōs) *n* [*L. ramus* branching.] Much branched.



ramule (rām ūl) *n.* [*L. ramulus* twig] A small branch ramulus.

ramuliferous (rām'ŭlī'fērūs) *a.* [*L. ramulus* twig *ferre* to bear] Bearing small branches.

ramulose (rām ūlūs) *ramulose*, (rām'ŭlūs) *a.* [*L. ramulus* twig] With many small branches.

ramulus (rām ūlūs) *ramuscul* (rāmūskŭl) *n.* [*L. ramulus* twig] A small branch.

ramus (rām ūs) *n.* [*L. ramus* branch.] Any branch-like structure part of chewing apparatus of rodents barb of feathers mandible or its proximal part of vertebrate branch of spinal nerve. *P/s ramu*.

ramine (rāmīn) *a.* [*L. rana*, frog] *P/vt* under surface of tongue *app* artery and vein

ramivorous (rāmīv ūrūs) *a.* [*L. rana*, frog *vorare* to devour] Feeding on frogs.

Ranvier's nodes [*L. A Ranvier* French histologist] Constrictions or interruptions of medullary sheath of nerve fibre.

raphe (rāfē) *n.* [*Gk raphē* seam.] A seam-like suture as junction line of some fruits line of fusion of funicle and anatropous ovul slit-like line in diatom valves line or ridge, of perineum scrotum hard palate, modulla oblongata, etc.

raphides (rāfīdēs) *n pln* [*Gk. raphis* needle] Micro crystals, frequently of calcium oxalate formed as metabolic by-products in plant cells.

raphidiferous (rāfīdī'fērūs) *a.* [*Gk. raphis* needle] *L. ferre* to carry] Containing raphides.

raptatory (rāptātōrī) *a.* [*L. raptor* to rob] Preying

raptorial (rāptō rīāl) *a.* [*L. rapere* to rob.] *App* birds of prey

racquet mycelium —hyphae enlarged at one end of each segment, small and large ends alternating racquet mycelium

rasorial (rāsō rīāl) *a.* [*L. radere* to scratch.] Adapted for scratching or scraping as fowls

rassenkreis (rās'takrīs) *n.* [*Ger Rasse* race *Kreis* circle] Polytropic species.

rastellus (rāstēl ūs) *n.* [*L. rastellus* rake.] A group of teeth in arachnid chelicera.

rate-gene—a gene which influences the rate of a developmental process rate-factor

Rathke pouch [*M H Rathke* German anatomist]. Diverticulum of buccal ectoderm in vertebrates, the commencement of prepituitary gland formation cranio buccal or neurobuccal pouch

ratite (rāt'it) *a.* [*L. ratit* raft.] Having an unkeeled sternum. *Opp* carinate

rattle (rātīl) *n.* [*M.E. rubles* to clatter] The sound producing series of bony joints at end of rattlesnake's tail.

Rauber's layer [*A Rauber* Estonian anatomist]. Covering layer of cells formed by part of trophoblast on embryonic ectoderm.

ray (rā) *n.* [*L. radius* ray] A parenchymatous band penetrating from cortex towards centre of stem one of bony spines supporting fins division of a radiate animal, as arm of asteroid one of straight unbranched tubules passing from medulla through cortex of kidney (medullary rays)

ray flo etc.—the outermost florets of composite flower

re cti a tim —time interval between stimulus and response.

reaction typ —phenotype

read,—the abomasum or fourth stomach of ruminants.

recapitulation theory—theory that ontogeny tends to recapitulate phylogeny that individual life-history reproduces certain stages in life-history of race biogenetic law Haeckel's law

receptacle (rēp'takl) *n.* [*L. recipere* to receive.] An organ used as repository peduncle of a racemose inflorescence torus or thalamus of flower enlarged end of thallus branch containing

- conceptacles terminal disc of mosses.
- receptacular (rēšptāk'ulār) *a.* [*L. recipere* to receive.] *Part.* a receptacle of any kind largely composed of the receptacle, as certain fruits.
- receptaculum (rēšptāk'ulūm) *n.* [*L. receptaculum* reservoir] A receptacle of any kind.
- receptaculum chylī,—the cavity in lower part of thoracic duct; cisterna chylī.
- receptaculum ovarum,—an internal sac in which ova are collected in earthworm.
- receptaculū in seminis,—female organ for reception of spermatozoa spermatheca.
- receptive spot,—small mucilaginous area adjacent to aperture in an ovum at which sperm enters point of sperm entry into ovum antheridial wall at point of contact with oögonium and of penetration of oosphere by fertilisation tube.
- receptor (rēšp'tōr) *n.* [*L. recipere* to receive.] Part of cell which functions as an antibody in combining with outside molecules or haptophores specialised tissue or cell sensitive to specific stimulus sense organ.
- recess (rēšs') *n.* [*L. recessus* withdrawn.] A fossa, sinus, cleft, or hollow space as cranial, optic, pineal recess recesses.
- recessive (rēšs'iv) *a.* [*L. recessus* withdrawn.] *Appl.* character possessed by one parent which in hybrid is masked by the corresponding alternative or dominant character derived from the other parent the allele which is not manifest in the F<sub>1</sub> heterozygote.
- reciprocal hybrids,—two hybrids, one descended from male of one species and female of another the other from a female of first and male of second.
- reclinate (rēk'līnāt) *a.* [*L. reclinare* to lean.] Curved downwards from apex to base *appl.* an ovule suspended from funiculus.
- reclining (rēk'līning) *a.* [*L. reclinare* to lean.] Leaning over not perpendicular
- ecrudescence (rēkroodēs ēns) *n.* [*L. re* again *crudesco* to become hard.] State of breaking out into renewed activity fresh growth from ripe part; relapse.
- recruitment (rēkroōt'mēnt) *n.* [*O F recruter* from *L. recrascere* to grow again] Activation of additional motor neurones, causing increased reflex when stimulus of same intensity is continued facilitation.
- rectal (rēk'tāl) *a.* [*L. rectus* straight.] *Part.* rectum *appl.* gland, a small vascular sac of unknown significance near end of gut in fishes.
- rectigradation (rēk'tigrādā'shūn) *n.* [*L. rectus* straight; *gradatio* flight of steps.] Adaptive evolutionary tendency structure exhibiting an adaptive trend or sequence in evolution.
- ectinerved (rēk'tōlērvd) *a.* [*L. rectus* straight *nervus* nerve.] With veins or nerves straight.
- rectipetality (rēk'tipetāl'itē) *n.* [*L. rectus* straight *petere* to seek.] Tendency to rectilinear growth anisotropism, *q.v.*
- rectirostral (rēk'tirō'strāl) *a.* [*L. rectus* straight *rostrum*, beak.] Straight-beaked.
- rectiserial (rēk'tisē'rīāl) *a.* [*L. rectus* straight *series* row] Arranged in straight or vertical rows.
- rective ones (rēk'tiv'ēnās) *a.* [*L. rectus* straight *vena*, vein.] With straight veins.
- rectogenital (rēk'tōjēn'tāl) *a.* [*L. rectus* straight *genitalia* genitals.] *Part.* rectum and genital organs.
- recto-uterus (rēk'tōū'tērīn) *a.* [*L. rectus* straight *uterus* womb.] *Appl.* posterior ligaments of uterus.
- rectovesical (rēk'tōvēs'īāl) *a.* [*L. rectus* straight; *vesica*, bladder] *Part.* rectum and bladder
- rectricial (rēk'trī'sīāl) *a.* [*L. regere* to rule.] *Part.* rectrices.

roctrix (rēk'trīks) *n.* *ectri* as (rēk'trīks) *p/n* [L. *regere* to rule.] The stiff tail feathers of bird used in steering  
 roctum (rēk'tūm) *n.* [L. *rectus* straight.] The posterior terminal part of alimentary canal.  
 actus (rēk'tūs) *n.* [L. *rectus* straight.] A name for a rectilinear muscle, as rectus femoris rectus abdominis etc.  
 recurr nt (ēkūr'ēnt) *a.* [L. *re* back *currere* to run.] Returning or re-ascending towards origin.  
 ecurr nt a sensibility — sensibility shown by motor roots of spinal cord due to sensory fibres of sensory roots.  
 recurved (rēkūr'd) *a.* [L. *curvus* bent back.] Bent backwards recurvate.  
 recurvirostral (ēkūr'vīrō'strāl) *a.* [L. *curvus* bent back *rostrum* beak] With beak bent upwards.  
 red body glands,—rete mirabile, *q.v.*  
 red corpuscle — a coloured blood corpuscle of vertebrates, containing haemoglobin erythrocyte  
 red nuclei — collection of nerve cells in tegmentum of midbrain.  
 redia (rēdīā) *n.* [*F. Redia* Italian scientist.] A larval stage of certain Trematoda.  
 ed x (rēdōks) *a.* [reduction-oxidation.] *Part* mutual reduction and oxidation.  
 d ction (ēdūkshū) *n.* [L. *reducere* reduced.] Halving of number of chromosomes at meiosis structural and functional development less complex than that of ancestry *appl* simplification decrease in size as in old age decreasing the oxygen content or increasing the proportion of hydrogen in chemical compound.  
 reduplicate (ēdūpīkāt) *a.* [L. *re* again *duplicare* to repeat.] *Appl* aestivation which margins of bud sepals or petals turn outwards at points of contact.

reduvild (rēdūvīld) *a.* [L. *redumbis*, hangnail.] *Appl* eggs of certain insects protected by micropyle apparatus with porches.  
 red ct d (rēdēk'tēd) *a.* [L. *reflexus* to turn back.] Turned or folded back on itself.  
 reflector layer — layer of cells on inner surface of photogenic thallus, as in fire-flies.  
 reflex (rēfleks) *a.* [L. *reflexus* to turn back.] Reflected involuntary *appl* reaction to stimulus. *n.* Function of reflex arc or arcs, being unit reaction or reaction pattern.  
 reflex action,—simplest expression of principles according to which nervous system acts, involuntary action on activation of reflex arc.  
 reflex arc,—the unit mechanism of nervous system consisting of organ whence reaction starts nervous path and gland cells or muscle cells receptor conductor and effector  
 reflex chain,—*see* chain behaviour  
 reflexed (rēfleks'd) *a.* [L. *flexare* to turn back.] Curved or turned backwards.  
 efract d (rēfrāk'tēd) *a.* [L. *re* back *frangere* to break.] Bent backwards at an acute angle.  
 efractory (ēfrāk'tōrī) *a.* [L. *efractus* obstinate] Unresponsive; *appl* period after excitation during which repetition of stimulus fails to induce a response  
 t generation (tjēn ērāshūn) *n.* [L. *generare* to beget.] Renewal of portion of body which has been injured or lost.  
 regma (rēg'mā) *n.* [*Gk. Regma* fracture] A seed-vessel whose valves open by elastic movement.  
 egular (rēg'ulār) *a.* [L. *regula*, rule] Radially symmetrical or actinomorphic *appl* flower  
 R II, Ial d of — *see* Iasula.  
 R Issen r's m mbrane [*E. Reissner* German physiologist]. The membrana vestibularis, stretching from lamina spiralis ossea to outer cochlea wall of ear

juvenescence (rē'jovēns ēm) *n.* [L. *res* again *juvenescere* to grow young.] A renewal of youth in cells, renewed life and vigour following on conjugation and inter change and fusion of nuclear and protoplasmic material; rejuvenation.

relational spiral,—plectonemic colling round one another of two chromosomes or chromatids ortho-spiral.

relaxation-time,—the period during which excitation subsides after removal of stimulus.

relaxin (rē'lik sh) *n.* [L. *relaxare* to loosen.] A luteal hormone which produces relaxation of pelvic ligaments during pregnancy.

relay cell,—internuncious or inter-nasal cell, *q.v.*

relie spiral,—surviving coil of chromosome at telophase and prophase.

relict (rē'likt) *n.* [L. *relictus* abandoned.] Not functional but originally adaptive, *appl.* structures surviving in an area isolated from main distribution area, owing to intervention of environmental events, *q.v.* of glaciation *appl.* species.

R mal' fibres (R. Ramak, German anatomist). Grey or gelatinous nerve fibres amyelinate or non-modellated fibres.

Ramak's plexus,—Meissner' plexus, *q.v.*

remax (rē'māks) *n.*, remiges (rēm hēs) *pl.* [L. *remex* rower] The large feathers or quills of bird wing, comprising primaries and secondaries.

remip d (rēm'ipd) *n.* [L. *remus* oar *pes* foot.] Having feet adapted for rowing motion.

renal (rē'nāl) *n.* [L. *ren*, kidney] *Part* kidneys or renes nephric

renal portal,—*appl.* system of circulation in which some returning blood passes through kidneys.

rene (rē'nē) *n. pl.* [L. *ren* kidney] Kidneys.

renette,—a glandular excretory cell in nematodes.

enculus (rē'nīk'ūlūs) *n.* [Dim. of L. *ren* kidney] Kidney lobe comprising papille, pyramid and surrounding part of cortex.

reniform (rē'nifōrm) *n.* [L. *ren*, kidney *forma*, shape.] Shaped like a kidney.

renin (rē'nīn) *n.* [L. *ren* kidney] A kidney protein, with vasopressor and diuretic effects.

renni (rē'nīn) *n.* [A.S. *rennan* to cause to run.] Milk-curdling enzyme of gastric juice, converts caseinogen into casein also secreted by glandular hairs of insectivorous plants chymosin.

renopericardial (rē'nōpērīkār diāl) *n.* [L. *ren* kidney *Gk. peri*, round *ardia*, heart.] *Appl.* narrow ciliated canal connecting kidney and pericardium in higher molluscs.

repand (ēpānd') *n.* [L. *repentus* bent backwards.] With undulated margin *appl.* leaf wrinkled *appl.* colony of bacteria.

repandodentate (rēpān dōdēn'tāt) *n.* [L. *repentus* bent backwards *dens* tooth.] Varying between undulated and toothed.

reparative (rēpār'atīv) *n.* [L. *reparare* to mend.] Restoring *appl.* buds developing after injury to leaf.

repent (rē'pēnt) *n.* [L. *repens* crawling] Creeping along the ground.

repiles (rēpīlēs) *n. pl.* [L. *replicatus* filled up.] Workers with distensible crops for storing and regurgitating honey-dew and nectar and constituting physiological caste of honey ants.

replicate (rēp'likāt) *n.* [L. *replicare* to fold back.] Doubled over on itself.

replicatill (rēp'likātīl) *n.* [L. *replicare* to fold back.] *Appl.* wings folded back on themselves when at rest.

repl m (rēp'lēm) *n.* [L. *replere*, holt.] The longitudinal division between valves of some pericarpe placental dissepiment.

reproducti n (rē'pūdīk shūn) n. [L. *gaine* *producers* to lead forth.] Continuation of species or race sexually or through cell-rupture cell-division budding spore formation, conjugation or parthenogenesis.

reptiloid (rēptīlōid) a. [L. *repters* to crawl. Gk. *reilas* form.] With characteristics of a reptile.

repugnatorial (rēpūg'nātō'riāl) a. [L. *repugnans* to resist.] Defensive or offensive *appl* glands and other structures.

reservoir (rēs'erwār) n. [F. from L. *rezervare* to keep back.] A non contractile space discharging into gullet of Mollusphora.

residual air—volume of air remaining in lungs after strongest possible breathing out.

residual meri t m.—meristematic ring p.

resilient (rēzil'ēnt) n. [L. *resilio* to leap back *ferre* to carry.] Projection of valve carrying the rethium rethophor.

resiliens (rēzil'ēns) n. [L. *resilio* to leap back.] The horny flexible hinge of a bivalve.

resin (rēs'in) n. [L. *resina* gum.] An acidic excretion product of certain plants either as an amorphous viscous solid or in solution in an essential oil as balsam.

resin canals,—duct in bark, ood mesophyll, etc. particularly of conifers lined with glandular epithelium excreting essential oil & terpenes forming oxidation product such as resin.

respiration (rēs'pirā shūn) n. [L. *respirans* breathing.] Gaseous interchange between an organism and its surrounding medium.

respiratory heart,—a name given to auricle and ventricle of right side of heart where there is no direct communication between right and left sides. *Opp* systemic heart.

respiratory pigments—pigments concerned with oxidation-reduction processes in living organisms.

haemoglobin haemocyanin, chlorocruorin etc. and catalysts, as cytochrome.

respiratory quotient,—the ratio between the volume of carbon dioxide produced and the volume of oxygen used.

stibrachium (rētib'rā kīām) n. [L. *rectus* rope *brachium* arm.] Restiform body or inf rior peduncle of cerebellum.

restiform (rēs'tifōrm) a. [L. *rectus* rope *forme* shape.] Having appearance of a rope *appl* two bodies of nerve fibres on medulla oblongata the inferior cerebellar peduncles.

restitution (rēs'titū shūn) n. [L. *restituere* restoration.] The formation of a single body by union of separate pieces of tissue the union of separated cells or blastomeres, or at chromosome breaks regeneration *appl* nucleus resulting from failure of first meiotic division.

resupinate (rēs'pīnāt) a. [L. *resupinare* to bend back.] So twisted that parts are upside down.

resupination (rēs'pīnā shūn) n. [L. *resupinare* to bend back.] Inversion.

rete (rē'tē) n. [L. *rete* net.] A net or network a plexus.

rete Malpighii,—Malpighian layer or deeper portion of epidermis, from stratum granulosum towards stratum germinativum.

rete mirabile,—network of blood vessels chiefly arterial in wall of swim-bladder of fishes and in certain mammals also called red body glands, spots vasoganglion.

ret mucosum,—Malpighian layer ectoderm (rēs'alōis) n. [L. *rete* net.] In form of a network.

retiform m.—retiform

retial (rēs'al rēs'alī) a. [L. *rete* net.] Pertaining to a rete.

retic (rēs'tīk) n. [L. *reticulum* small net.] A reticulum reticulate.

reticular (rēs'tīk alār) a. [L. *reticulum* small net.] Having interstices like network *appl* reticulum; *appl* tissue.

reticular cells,—mesenchymal cells of bone-marrow lymph glands, and spleen, giving rise to granulocytes, lymphocytes and monocytes.

reticulate (rĕtĭk'ŭlāt) *n.* [*L. reticulatus* latticed.] Like network *appl.* *nerivation* of leaf or insect wing *appl.* *thickening* of cell-wall *appl.* *spores* formation due to inter crossing between several lines.

reticulocyte (rĕtĭk'ŭljōt) *n.* [*L. reticulatus*, small net *Hydro* hollow] An immature erythrocyte, of reticular appearance when stained.

reticulo endothelial (rĕtĭk'ŭljēn dōthē'ŭlāl) *n.* [*L. reticulatus*, small net *Gk. reticulum*, within *thele* nipple.] *Appl.* cells, or stationary histocytes of various organs, and functioning as phagocytes in the production of antibodies, or in destroying erythrocytes *appl.* *system*, or metabolic apparatus, consisting of reticulum and endothelial cells and of wandering histocytes.

reticulae (rĕtĭk'ŭlā) *n.* [*L. reticulatus*, small net.] Of network formation.

reticuli (rĕtĭk'ŭlūm) *n.* [*L. reticulatus* small net.] Delicate network of cell protoplasm; cross-fibres about base of petioles in palms; the honey-comb bag or second stomach of a ruminant the framework of reticular tissue in many organs.

retiform (rĕtĭfōrm) *n.* [*L. rete* net *forma*, shape.] *I* form of network also reteform.

retina (rĕtĭnā) *n.* [*L. rete* net.] The inner nervous membrane of eye which receives images.

retinaculum (rĕtĭnāk'ŭlūm) *n.* [*L. retinaculum* tether] A small glandular mass to which an orchid pollinium adheres at dehiscence.

fibrous band which holds parts closely together a minute hooked prominence holding egg-sac in position in arripedes structure linking together fore and hind wings of some insects ppendages

modified to hold furcula beneath abdomen in springtails. *Paw* retinacula.

retinaculum *i* *diuum*,—annular ligament [wrist or ankle.

etinal (rĕtĭnāl) *n.* [*L. rete* net.] *Part* the retina.

retinilla (rĕtĭnēlā) *n.* [*Dim.* *f* *L. rete* net.] Neurofibrillar network of phasome.

retinen (rĕtĭnēn) *n.* [*L. retina* retina.] A carotenoid retinal pigment formed from visual yellow in dark-adapted eye.

retinerved (rĕtĭnērvēd) *n.* [*L. rete* net *nerve* sinew] *H* ving reticulate veins nerves.

retinoblasts (rĕtĭnōblāst) *n. pl.* [*L. rete* net *Gk. blastos* bud.] Retinal epithelial cells which give rise to neuroblasts and pougioblasts.

retinophore (rĕtĭnōfōr) *n.* [*L. rete* net *Gk. phoreo*, to bear] A crystal cell in ommatidium of Arthropoda.

retinal (rĕtĭnāl) *n.* [*L. rete* net.] Group of elongated pigmented cells, innermost element of an ommatidium.

retisoluti (rĕtĭsōlūtūm) *n.* [*L. rete* net *solutio* solution.] Dissolution of the Golgi apparatus.

retisparal (rĕtĭspērālūm) *n.* [*L. rete* et *disperio* dispersion.] Peripheral distribution of Golgi apparatus in cell.

retort-shaped organs,—glandular thecae at proximal ends of maxillary stylets, in Hemiptera.

retractil (rĕtrāk'tīl) *n.* [*L. retractor* withdrawn.] *Appl.* part or organ that may be drawn inwards, as feelers, claws, etc.

retractor (rĕtrāk'tōr) *n.* [*L. retrahere* to draw back.] A muscle which by contraction withdraws the part attached to it.

retrahens (rĕtrāhēns) *n.* [*L. retrahere* to draw back.] A muscle which draws part backwards as the auricularis posterior.

retral (rĕtrāl) *n.* [*L. retrahere* back wards] Backward posterior

**ret bulb** (rēt' bŭlb' bŭlr) *n* [*L. retr* backwards *bulbus* bulb] Posterior to eyeball.

**retrocaecal** (rēt' rōs' kāl) *a* [*L. retr* backwards *caecus* blind.] Behind caecum *appl* foetus

**retrofract** (rēt' rōfrākt) *a* [*L. retro* backwards *fractus* broken.] Bent backwards at an angle.

**retrogression** (rēt' rōgrēsh' ūn) *n* [*L. r* *trahere* going back.] A step from superior to inferior type in individual or race degeneration.

**retrogressive** (ēt' ōgrēs' īv) *a* [*L. retrogressus* going back.] Degenerating assuming character traits of a lower type.

**retrolingual** (rēt' rōllīng' gwāl) *a* [*L. retro* backwards *lingua* tongue.] Behind the tongue *appl* gland.

**retromorphosis** (rēt' rōmōr' fōsis) *n* [*L. retro* backwards *Gk. morphē* form.] Development with de generating tendency

**retroperitoneal** (rēt' ōpēr' tōnō' ēāl) *a* [*L. retr* backwards *Gk. per* round *trahere* to stretch.] Behind peritoneum *appl* space between peritoneum and renal column.

**retropharyngeal** (ēt' rōfārīng' jēāl) *a* [*L. retro* backwards *Gk. pharynx* pharynx] Behind the pharynx *appl* a space lymph glands.

**retro pubi** (ēt' rōpū' bŭk) *a* [*L. retro* backwards *pubes* mature] *Appl* a pad or mass of fatty tissue behind pubic symphysis.

**retroscapular** (rēt' rōskāp' ūlār) *a* [*L. trahere* backwards] Turned or directed backwards.

**retroserrate** (ēt' ōsēr' ās) *a* [*L. retro* backwards *serra* saw] Toothed with teeth directed backwards *serrate*.

**retroserrulat** (ēt' rōsēr' ālās) *a* [*L. retro* backwards *serrula* small saw] With small retroscapular teeth

**retro-uterine** (ēt' rōū' tērīn) *a* [*L. retro* backwards *uterus* womb] Behind the uterus.

**retrovert** (ēt' rōvērt) *a* [*L. re-* *vertens* turned backwards] Retroscapular

**retroversion** (rēt' ōvēr' shūn) *n* [*L. retrovertens* turned backwards.] State of being reversed or turned backwards.

**retuse** (ētūs') *a* [*L. r* *truncus* blunted.] Obtuse with a broad shallow notch in middle; *appl.* leaves molluscan shells.

**revehant** (rēt' vēhēnt, rēt' ēhēnt) *a* [*L. revehens* carrying back.] In renal portal system, *appl* vessels carrying blood back from excretory organs.

**reverse mutation**,—mutation of a mutant gene back to its original state back mutation.

**reversed** (rētēr' sēd) *a* [*L. revertere* turned back] Inverted *appl* a spiral shell whose turns are directed sinistrally *appl* barbs united to rachis by their apices.

**reversion** (rētēr' shūn) *n* [*L. revertere* turning back.] Atavism a return in a greater or less degree to some ancestral type.

**reversionary** (ētēr' sōndērī) *a* [*L. revertere* turning back.] *Appl.* atavistic characteristics.

**rev rt** (ēvērt') *a* [*L. revertere* to turn back.] To exhibit ancestral features to hark back.

**revolute** (rēt' ōlūt) *a* [*L. revolvare* to roll back.] Rolled backwards from margin upon under surface, as some leaves.

**rhabdite** (rāb dīt) *n* [*Gk. rhabdos* rod] One of short rod-like bodies in epidermal cells in Polychaetida a gonapophysis.

**rhabditiform** (rābdīt' īfōrm) *a* [*Gk. rhabdos* rod *L. forma*, shape.] *Appl* larvae of roundworms with short straight oesophagus, with double bulb

**rhabditis** (rābdīt' īs) *n* [*Gk. rhabdos* rod] Larva of certain nematodes.

**rhabdoer pid** (rāb dōkērē pēd) *a* [*Gk. rhabdos* rod *trepos* foundation.] *Appl* desma with uniaxial crepus in sponge spicules.

**rhabdoid** (rāb dōid) *a* [*Gk. rhabdos* rod *oides* form.] Rod-like. *n* Any rod-shaped body

- habdolith** (rāb dōlith) *n.* [Gk. *rhabdos* rod *lithos* stone.] A calcareous rod found in some protozoa, strengthening the walls.
- habdome** (rāb dōm) *n.* [Gk. *rhabdos* rod.] A refractive rod composed of rhabdomeres enclosed by retinula cells of ommatidium.
- rhabdome** (rāb dōmēr) *n.* [Gk. *rhabdos* rod *meros* part.] The refracting element in retinula.
- rhabdopod** (rāb dōpōd) *n.* [Gk. *rhabdos* rod *pous* foot.] An element of clasper of some male insects.
- rhabdosphere** (rāb dōsēr) *n.* [Gk. *rhabdos* rod *sphaire*, globe.] Aggregated rhabdoliths found in deep-sea calcareous oozes.
- habdus** (rāb dōs) *n.* [Gk. *rhabdos* rod.] A rod-like spicule haechia, etc.—*see* *machia*.
- Rhaetic** (rē'tik) *a.* [L. *Rhaetia*, Grisons or Tirol.] *Appl.* fossils found in marls, shales, and limestone between Trias and Lias.
- rhagon** (rā gō) *n.* [Gk. *rhiza* grape.] A bun-shaped type of sponge with apical osculum and large gastral cavity.
- ramphoid** (rām'fōid) *a.* [Gk. *ramphos* beak *eidos* form.] Beak shaped.
- ramphotheca** (rām'fōth'ēkē) *n.* [Gk. *ramphos* beak *thēka* case.] The horny sheath of bird's beak.
- rheobase** (rē'ōbās) *n.* [Gk. *rhēin*, to flow *basis* ground.] The minimal or liminal electric stimulus that will produce response rheobasis.
- rhogameon** (rē'ōgāmē'ōn) *n.* [Gk. *rhēin* to flow *gameon* marriage as being.] A polytypic species *rasenkron*.
- rhoreceptors** (rē'ōrēōp'tōrs) *n. pl.* [Gk. *rhēin*, to flow L. *receptus* to receive.] Cutaneous sense organs of fishes and certain amphibians, receiving stimulus of water current, as pit organs, lateral line organs, ampullae of Lorenzini, vesicles of Savi.
- rheotaxis** (rē'ōtāk'sis) *n.* [Gk. *rhēin* to flow *taxis* arrangement.] Locomotor response to stimulus of

current, usually of water current rheotropism *q.v.*

**rheotropic** (rē'ōtrōp'ik) *a.* [Gk. *rhēin* to flow *trōpē* turn.] Responding to current stimulus rheotactic.

**rhotropism** (rē'ōt rōptām) *n.* [Gk. *rhēin*, to flow *trōpē* turn.] Curvature or growth response to influence of water or air current; rheotaxis, *q.v.*

**rheus factor**—Rh factor antigen in blood of rhesus monkey and man, and agglutinated by an (rh) antibody in individuals lacking the factor which is inherited as Mendelian dominant.

**hexis** (rēks'is) *n.* [Gk. *hexis* breaking.] Fragmentation of chromosomes caused by physical or chemical agents.

**rhinal** (rī'nāl) *a.* [Gk. *rhis* nose.] Of or *pert* the nose *appl.* fissure separating rhinencephalon, or olfactory lobe and tract, and cerebral hemisphere.

**rhinarium** (rī'nāl rī'ām) *n.* [Gk. *rhis* nose.] The nasal external nasal area of mammals nostril area part *in* *nasus* *in* *nasus* insects.

**rhinencephalon** (rī'nēnkef'ālōn, -sēf) *n.* [Gk. *rhis* nose; *enkephalos* brain.] The part of the fore-brain forming most of the hemispheres in fishes, amphibians and reptiles, and comprising in man the olfactory lobe uncus the supracallosal, subcallosal and dentate gyri, fornix, and hippocampus.

**rhinal** (rī'nāl) *n.* [Gk. *rhis* nose.] Most prominent point at which nasal bones touch.

**rhinocaul** (rī'nokōl) *n.* [Gk. *rhis* nose *caulus* stalk.] Narrowed portion of brain which bears the olfactory lobe olfactory peduncle **rhinocoel** (rī'nōkēl) *n.* [Gk. *rhis* nose *caulus* hollow.] Cavity in olfactory lobe of brain.

**rhinopharynx**—*nasopharynx*, *q.v.*

**rhinophore** (rī'nōfōr) *n.* [Gk. *rhis* nose *phorein* to bear.] A process on aboral side of eye of certain molluscs, with supposed olfactory function.



rhinotheca (ri'nðthē'kā) = [Gk. *rhin* nose *theca* case] The sheath of upper jaw of a bird.

rhipidate (rip'idā) = [Gk. *rhypis* fan.] Fan-shaped.

hipidium (rip'id'ium) = [Gk. *rhypis* fan *idion* dim.] A fan-shaped cymose inflorescence or a fan-shaped colony of zooids.

rhipidostichous (rip'idōs'tikōs) = [Gk. *rhypis* fan *stichos* row] *Appl.* fan-shaped fins.

rhizanthous (rizān'thūs) = [Gk. *rhiza* root *anthos* flower] Producing a root, and a flower apparently straight from it.

hizanteicous (ri'zōtē'kōs) = [Gk. *rhiza* root *entes* self *ous* home.] With anthedial and archegonial branches coherent.

hizin (ri'zin) = [Gk. *rhiza* root.] A rhizoid as of moss lichens.

hizocaine (ri'zōkē'n) = [Gk. *rhiza* root *haioin* to summon.] A substance promoting root growth present in pollen and leaves of some plants also found in urine.

rhizocarp (ri'zōkārp) = [Gk. *rhiza* root *karpos* fruit.] A perennial herb.

hizocarpous (ri'zōkār'pūs) = [Gk. *rhiza* root *karpos* fruit.] Having perennial roots and annual stems.

rhizocaul (ri'zōkōl) = [Gk. *rhiza* root *kaules* stem.] The root like horizontal portion of epiphyte hydrothusa.

rhizocorm (ri'zōkōrm) = [Gk. *rhiza* root *cormos* log.] An underground stem like a single-jointed rhizome popularly a bulb.

hizodermis (ri'zōdēr'mis) = [Gk. *rhiza* root *dermis* skin.] Outer most layer of root tissue epiblema piliferous layer.

hizogen (ri'zōjēn'ik) rhizog-ous (ri'zōjēn'ūs) = [Gk. *rhiza* root *genn* descent.] Root producing arising from endodermic cells not developed from pericycle *perit* or stimulating root formation.

rhizoid (ri'zoid) = [Gk. *rhiza* root *oides* form.] A root-like outgrowth of thallus of algal liverwort

mosses, ferns unicellular hair on lower side of prothallus. = Root like *appl.* form of bacterial colony.

rhizomatous (ri'zōmātūs) = [Gk. *rhizoma* root.] Like a rhizome.

rhizoma (ri'zōm) = [Gk. *rhizoma* root.] A thick horizontal stem partly along and partly under ground sending out shoots above and roots below.

hizomorph (ri'zōmōrf) = [Gk. *rhiza* root *morphē* form.] A root like strand of hypha in certain fungi.

rhizomorphic (ri'zōmōrf'ik) = [Gk. *rhiza* root *morphē* form.] In form of a root root-like rhizomorphic.

rhizomycellium (ri'zōmē'shēm) = [Gk. *rhiza* root *mykes* fungus.] A rhizoid mycelium connecting reproductive bodies in certain Phycomycetes.

hizophagous (ri'zōf'agūs) = [Gk. *rhiza* root *phagō* to eat.] Root-eating.

rhizophore (ri'zōfōr) = [Gk. *rhiza* root *phero* to bear.] A naked branch which grows down into soil and develops roots from apex as in club-mosses.

hizophorous (ri'zōfōr'ūs) = [Gk. *rhiza* root *phero* to bear.] Root-bearing.

hizopin (ri'zōpin) = [*Rhizopus* a genus of Mucoraceae.] A plant growth-promoting substance extracted from substrate of *Rhizopus* and probably identical with heteroauxin.

hizoplasts (ri'zōplāsts) = *pl.* [Gk. *rhiza* root *plasis* moulded.] Fibrillae connecting parabasal body or blepharoplast and nucleus in Flagellata intracytoplasmic portions of axonemes.

hi podium (ri'zōpō'diūm) = [Gk. *rhiza* root *pus* foot.] A branching and anastomosing filamentous pseudopodium.

rhizosphere (ri'zōsfe) = [Gk. *rhiza* root *sphaire* ball.] The soil immediately surrounding the root system of plant.

hixotaxis (rī'xōtīk'sia) *n.* [Gk. *rhiza*, root *axis* arrangement.] Root arrangement.

rhodophane (rō dōfān) *n.* [Gk. *rhodon* rose *phaino* to appear] A red chromophane.

rhodophyll (rō dōfīl) *n.* [Gk. *rhodon*, rose; *phyllon*, leaf.] The red colouring matter of red algae.

rhodopl (rō dōpīn) *n.* [Gk. *rhodon* rose *pliro*, to absorb.] A carotenoid pigment of certain bacteria.

rhodopsin (rōdōp sīn) *n.* [Gk. *rhodon*, rose *opsis* sight.] A temporary reddish-purple pigment in retinal rods visual purple.

rhodoxanthin (rō dōxān'thīn) *n.* [Gk. *rhodon*, rose; *xanthos* yellow] A carotenoid pigment, found in aril of yew  $C_{40}H_{56}O_6$ .

rhombencephalon (rōmb ēn'kēf'ālōn, -ēf) *n.* [Gk. *rhombos* wheel *enkephalos* brain.] Hind brain, consisting of the lathus rhombencephalon, metencephalon, and myelencephalon the third primary vesicle.

rhombic (rōm'bīk) *a.* [Gk. *rhombos* wheel.] *Appl.* Lip and grooves of beam at rhomboid fossa.

rhombogen (rōm'bōjēn) *n.* [Gk. *rhombos* wheel; *gennao* producing] Phase of parent form in life cycle of some Mesozoa, involving production of infusoriform embryos, or males.

rhomboid (rōm'bōid) *a.* [Gk. *rhombos* rhombus; *eidos* form.] Rhombus-shaped *appl.* fonsa, sinus, ligament, scales.

rhomboid m.—the rhomboid or costoclavicular ligament.

rhomboid os, major and minor—parallel muscles connecting scapula with thoracic vertebrae.

rhomboid ovate,—between rhomboid and oval in shape.

rhopalium (rōpāl'itūm) *n.* [Gk. *rhopalos*, club.] A marginal sense organ of Diacoelozoans.

rhynchocoel (rīng'kōēf) *n.* [Gk. *rhynchos* snout; *coelos* hollow] 1 Nematode, tubular cavity with

muscular walls serving to evert proboscis.

rhynchodaeum (rīng'kōdē ūm) *n.* [Gk. *rhynchos* snout *daemos* part. a way] The precerebral region of nemertine.

rhynchodont (rīng'kōdōnt) *a.* [Gk. *rhynchos* snout *odous* tooth.] With a toothed beak.

rhynchophorous (rīng'kōf'ōrūs) *a.* [Gk. *rhynchos* beak *phorein*, to bear] Beaked.

rhynchostom (rīng'kōstōm) *n.* [Gk. *rhynchos* snout; *stoma*, mouth.] Anterior terminal pore through which proboscis is everted, in Nemertea.

rhythm (rīhm) *n.* [Gk. *hythmos* measured motion.] Regularity of movement, as seen in heart pulsation, or in movement of telegraph plant leaves periodic occurrence seasonal variation.

rytid me (rī'kīōm) *n.* [Gk. *rytis* wrinkle *dermis* layer] The outer bark.

rib (rīb) *n.* [A.S. *rēb* rib.] A curved bone of thorax articulating with spine and either free at other end or connected with sternum primary or central vein of leaf costa.

Ribaga's organ,—abdominal opening leading to Berlese's organ, *q.v.*

riboflavin (rībōfā vīn) *n.* [L. *ribes* current *flavus* yellow] Vitamin B<sub>2</sub> or growth factor G important in oxidation processes agent of yellow enzyme lactoflavin;  $C_{17}H_{27}O_6N_4$ .

ricial (rīk'īāl) *a.* [L. *ricus* mouth aperture.] *Part.* mouth gape of birds.

rigor (rīg'ōr) *n.* [L. *rigor* stiffness.] The rigid state of plants when not sensitive to stimuli contraction and loss of irritability of muscle on heating due to coagulation of proteins.

rigor mortis,—stiffening of body after death, due to myosin-formation, and lasting till commencement of decomposition.

rims (rī'mī) *n.* [L. *rima*, cleft.] A cleft or fissure, *e.g.* glottidis, palpebral, pudendal orifice of mouth.

rimat (rīmāt) *n* [*L. rima* cleft] Having fissures.

rimiform (rīmifōrm) *n* [*L. rima* cleft *forma* shape.] In shape of a narrow fissure.

rimose (rīmōse) *a* [*L. rima*, cleft.] Having many clefts or fissures.

rimulose (rīmūlōse) *a* [*L.L. rimula* small cleft.] Having many small clefts.

rind (rīnd) *n*. [*A.S. rīnde* bark.] The outer layer tissue or cortex.

ring bark,—bark of a tree where formations of phellogen are cylindrical of scale-bark.

ring-canal,—a circular canal running close to and parallel with umbrella margin in Hydrosol circular vessel around gullet in Echinoidea.

ring cell,—a thick walled cell of sporangium annulus of ferns.

ring-chromosomes,—chromosomes with no ends = mitosis : chromosomes attached end to end in mitosis.

ringent (rīnjēt) *a* [*L. ringo* to open mouth] Having lips, as of corolla or valves separated by distinct gap with upper lip arched gaping.

ring gland — glandular structure around aorta, with elements representing corpus allatum, corpus cardiacum pericardial gland, and hypocerebral ganglion, secreting the metamorphosis-producing hormone in Diptera Weismann's gland.

ringless,—*appl* ferns without an annulus.

ring porous,—*appl* wood in which the vessels tend to be large and have thinner walls than those in diffuse-porous wood.

ring vessel,—a structure in head of cestodes which unites the four longitudinal excretory trunks.

riparian (rīpārīān) *n* [*L. ripa* river bank.] Riparial, riparianous frequenting growing on or living on the banks of streams rivers.

*part.* ripa or line of ependymal fold over a plexus or tela.

risorius (rībōrīūs) *n* [*L. rīrio* laughter] A cheek muscle stretching from over masseter muscle to corner of mouth.

roissian (rīvīn'liān) *a*. [*A. Q. Roissius* German anatomist.] *Appl* sublingual glands and ducts *appl*. notch in ring of bone surrounding tympanic membrane.

ribose (rī'rōse) *n* [*L. rīvus* stream.] Marked with irregularly winding furrows or channels.

ribose (rīv'ōlōse) *a* [*L. rīvulus* rivulet] Marked with sinuate narrow lines or furrows.

rod-epithelium — epithelium consisting of apparently striated cells.

rod fibre,—fibre with which a rod of retina is connected internally to fructification,—fructification occurring in Bandiomyces by means of rod-like gonidia from a hyphal branch.

rod granule,—nucleus of rod fibre.

rod rat (rōdēt) *n* [*L. rodere* to gnaw] An animal with a habit of gnawing or nibbling as rabbit.

roding (rōdīng) *n* [*A.S. rode* raid.] Patroling flight of birds defending territory.

rode and cones,—nerve-epithelium layer of retina.

rolandic (rōlān dīk) *a* [*L. Rolandus* Italian anatomist.] *Appl* fissure central sulcus (cerebral hemispheres) *appl* tubercle or tuberculum clareum of posterior region of medulla oblongata, and gelatinous substance of dorsal horn of spinal medulla.

root (rōot) *n*. [*A.S. wrot* root.] Descending portion of plant, fixing it in soil and absorbing moisture radix, *g*.

root bore t.—a larval form or insect which bores into roots of plants.

root-cap,—a protective cap of tissue at apex of root.

root-cell,—clear colourless base of an alga, attaching thallus to substratum.

root-climber — a plant which climbs by roots developed from stem.

root hairs,—unicellular epidermal outgrowths from roots, of protective and absorbent function.

rootlet,—an ultimate branch of a root.

root nodules,—small swellings on roots of leguminous plants and containing nitrogen-fixing bacteria

root parasitism,—a condition exhibited by semi-parasitic plants, roots of which penetrate roots of neighbouring plants and draw from them elaborated food material.

root pocket,—a sheath containing root, especially of aquatic plants.

root pressure,—the force by which water is made to rise in axial stele of plant, main factor in transport of water through plant.

root process,—a branched structure fixing an algal thallus to substratum.

root-sheath,—a callosities an orchid vesicles that part of hair follicle continuous with epidermis.

root-stalk,—a root-stock or rhizome root-like horizontal portion of Hydrozoa.

root-stock,—more or less erect underground part of stem rhizome, *q.v.*

root tubercles,—root nodules, *q.v.*

root tubers,—swollen roots of certain plants as of *Ficaria*.

rosaceous (rōs'zhūs) *a.* [*L. rosa, rose*] With five petals arranged in circle resembling rose.

rosette (rōs'ēti) *a.* [*L. rosa, rose*] Arranged like rosettes rosulate.

Rosenmüller' organ [*/ C Rosenmüller* German anatomist] Epiphoron, *q.v.*

rosette (rōs'ēti) *a.* [*F. from L. rosa, rose*] A cluster of leaves arising in close circles from a central axis

group of cells between embryo and proembryonic remains, also arrangement of embryos as in *Pinus* plant disease due to deficiency of boron of zinc

a swirl or vortex of hair in pelage

small cluster of blood cells

group of spiracular channels in exocuticle of some aquatic insects

this plate formed by coalescence of interradial basals of larval

erined a large ciliated funnel leading out of anterior sperm reservoir of earthworm.

rosette organ,—in certain scudians, ventral complex stolon from which buds are constricted off.

rostral (rōs'tāl) *a.* [*L. rostellum* *dim. of rostrum* beak.] A rostellum.

rostellar (rōs'tēl'ār) *a.* [*L. rostellum* small beak.] *Part* a rostellum.

rostellate (rōs'tēl'āt) *a.* [*L. rostellum* small beak.] Furnished with a rostellum.

rostril (rōs'trīl) *a.* [*L. rostellum* small beak *forma, shape*] Shaped like small beak.

rostellum (rōs'tēl'um) *a.* [*L. rostellum* small beak.] A small rostrum projecting structure developed from stigmatic surface of orchid flower rounded prominence, furnished with hooks on suture of tape-worm tubular mouth parts of certain apterous insects beaked-shaped process.

rostral (rōs'trāl) *a.* [*L. rostrum* beak.] *Part* rostrum.

rostral gland,—premaxillary part of labial gland as in snakes labial gland of spiders

rostrate (rōs'trāt) *a.* [*L. rostrum* beak] Beaked.

rostriform (rōs'trīf'orm) rostriform (rōs'trōid) *a.* [*L. rostrum, beak forma, shape* Gk. *eidos* form.] Beak-shaped

rostrul (rōs'trōul) *a.* [*L. L. rostrum* small beak.] With, or like, rostrum.

rostrulum (rōs'trōul'm) *a.* [*L. L. rostrum, small beak*] A small rostrum.

rostrum (rōs'trūm) *a.* [*L. rostrum* beak.] Beak or beak-like process projecting process between eyes of crayfish median ventral plate at base of capitulum of Cirripedia labrum *f. pideris* prominence or micro *t* posterior end of sepium anterior end *f. gregarina*, which forms epimerite pre-nasal region anterior continuation of basipharyngeal backward prolongation of anterior end of corpus callosum.

rosular (rô'ûlâr) rosulate (rô'ûlsî)  
 a. [L. *rosa rose*] Arranged in  
 rosettes.

rot (rôt) v. [A.S. *rotan* to rot.]  
 Decay decomposition disease  
 caused by fungi or bacteria a  
 parasitic disease causing emacia-  
 tion.

rotate (rô'tîlî) a. [L. *rotâ* wheel.]  
 Shaped like wheel rotiform

rotation (rôtâ'shôn) n. [L. *rotâ*  
 wheel.] Turning as on a pivot,  
 as limbs circulation, as of cell  
 sap

rotator (rôtâ'tôr) n. [L. *rotâ* wheel.]  
 A muscle which allows of circular  
 motion.

rotatores spinæ—paired muscles,  
 one on either side of thoracic  
 vertebrae each arising from trans-  
 verse process and inserted into  
 vertebra next above.

rotiform (rôtî'fôr'm) a. [L. *rotâ*  
 wheel *forma, shape*] Wheel  
 shaped circular

otula (rôt'ûlâ) n. [L. *rotula* small  
 wheel] One of five radially-directed  
 bars bounding circular peritreme of  
 oesophagus of sea-urchin patella  
 or knee-cap

otular (rôt'ûlâr) a. [L. *rotula* small  
 wheel] *Peri* the rotula

otuliform (rôt'ûlî'fôr'm) a. [L. *rotula*  
 small wheel *forma shape*] *Peri*  
 Shaped like a small wheel.

rotundifolious (rôtûn'dî'fôli'ôz) a. [L.  
*rotundus* round *folium* leaf]  
 With rounded leaves

Roux t cells (A. D. Roux) French  
 physiologist] Contractile branched  
 cells external to walls of capillaries  
 associated with alteration of lumen  
 pericytes.

roul aux (rôul'ôz rôul'ôz) n. *plu* [F.  
*rouler* roll] Formations like  
 piles of coins into which red blood  
 corpuscles tend to aggregate.

rubiginous (roobî'jî'nîz) rubiginous  
 (roobî'jî'nîz) a. [L. *rubigo* rust]  
 Of a brownish red tint rust  
 coloured affected by rust parasites

rubrospinal (roob rôspî'nâli) a. [L.  
*ruber* red *spina* spine.] *Appl*  
 descending tract or fasciculus of

axons of red nucleus, a ventro-  
 lateral column of spinal cord.

ruderal (rood'êrâl) a. [L. *rudis*  
 debris.] Growing among rubbish  
 or debris.

rudimentary (rood'imên'tîrî) a. [L.  
*rudimentum*, first attempt.] In an  
 imperfectly developed condition  
 at an early stage of development  
 arrested at an early stage ves-  
 tigital (certain authors)

ruff (rûf) n. [A.S. *ruf* rough.] A  
 neck fringe of hair or feathers

Ruffini's organs (A. Ruffini Italian  
 anatomist). Cylindrical end bulbs  
 containing interlaced branches of  
 nerve endings in subcutaneous  
 tissue of finger corpuscles of Ruffini.

rufinism (roo'fî'nîz'm) n. [L. *rufus*  
 reddish.] Red pigmentation due to  
 inhibition of formation of dark  
 pigment.

ruga (roog'â) n. [L. *ruga* wrinkle.]  
 A fold or wrinkle, as of mucous  
 membrane of certain organs.

rugate (roog'ât) rugose (roog'ôz)  
 rugous (roog'ôz) a. [L. *ruger*  
 to wrinkle] Wrinkled with many  
 wrinkles on surface.

rugulose (roog'ûlôz) a. [L. *ruga*  
 wrinkle.] Finely wrinkled.

rumen (room'ên) n. [L. *rumen*  
 cud.] The paunch or first cavity  
 of ruminant stomach.

ruminant (room'inânt) n. [L. *rumi-*  
*ner* to chew the cud.] An animal  
 which retunes and re-chews what  
 has been swallowed

ruminate (room'inât) a. [L. *rumi-*  
*ner* to chew the cud.] Having  
 mottled appearance through infold-  
 ing of tegumen having mottled  
 albumen *appl* such seed as beet-  
 nut = T chew the cud.

rumination (room'inâ'shôn) n. [L.  
*ruminare* chewing of cud.] The  
 act of ruminant animal = returning  
 food from first stomach to mouth in  
 small quantities for thorough  
 mastication and insalivation.

runcinate (rûn'sînâ) a. [L. *runcina-*  
 plane] *Appl* a pennatifid leaf  
 when divisions point towards base  
 as in dandelion

runner (rūn t) \* [A.S. *rinnan* to run.] Slender prostrate stem which roots at nodes, as of strawberry stolon.

rupestris (roopē'trīn) rupicoline (roopik'ōlīn) rupicolous (roopik'ōlīs) \* [L. *rupes* rock; *colere* to inhabit] Growing or living on rocks.

rutil (rūp'it) \* [L. *rumpere* to break.] Bursting in an irregular manner.

rust (rūt) \* [A.S. *rust* redness.] A disease of grasses and other plants caused by Uredinales parasitic fungi which produce uredospores in summer teliospores in winter.

rut (rūt) \* [M.E. *rutian* to rut.] Period of heat in male animals of oestrus.

rutilans (root'itlān) \* [L. *rutilus* red.] Rufous.

## S

sabuline (sāb'ūlīn) \* [L. *sabulosus* sandy.] Sandy sabulose sabulous growing in sand.

sac (sāk) \* [L. *saccus* sack.] A sack, bag or pouch.

saccate (sāk'tē) \* [L. *saccus* sack.] Pouched *appl.* calyx of which two lateral sepals are expanded into little sacs or pouches gibbous.

saccharos (sāk'trōs) \* [Gk. *sakchar* sugar] Cane sugar sucrose.

sacciferous (sāk'sif'ēriūs) \* [L. *saccus* sack *ferre* to bear] Furnished with sac.

sacciform (sāk'sif'ōm) \* [L. *saccus* sack *forma*, shape] Lik *unc* or pouch saccular.

sacculate (sāk'silāt) \* [L. *sacculus* small bag] Provided with saccul.

saccal (sāk'ūlīs) \* [L. *sacculus* small bag] A saccule or small sac a peridium lower part of vestibule of ear ppendix of laryngeal ventricle lower portion of harpa.

saccus (sāk'ts) \* [L. *saccus* sack.] A sac like structure, — as saccus

vasculosus, saccus endolymphaticus saccus lacrimalis ninth abdominal sternite of certain male insects; median invagination of vinculum in Lepidoptera.

sacral (sāk'rāl) \* [L. *sacer* sacred.] Pert. the sacrum.

sacral index,—one hundred times the breadth of sacrum at base, divided by anterior length.

sacral ribs,—elements of sacrum joining true sacral vertebrae to pelvis.

sacrocaudal (sāk'rōk'ōd'āl) \* [L. *sacer* sacred *cauda*, tail.] Pert. sacrum and tail region.

sacrocoxygeal (sāk'rōk'ōk'sij'ēl) \* [L. *sacer* sacred Gk. *kōkys* cuckoo.] Pert. sacrum and coccyx.

sacro-iliac (sāk'rōd'īl'āk) \* [L. *sacer* sacred *ilium*, femur.] Pert. sacrum and ilium *appl.* joint, ligaments.

sacro-lumbar (sāk'rōlūm'bār) \* [L. *sacer* sacred *lumbus* loin.] Pert. sacral and lumbar regions.

sacrospinal (sāk'rōspī'nāl) \* [L. *sacer* sacred *spina* spine] Pert. sacral region and spine.

sacrovert bral (sāk'rōvēr'tēbrāl) \* [L. *sacer* sacred *vertebra*, joint.] Pert. sacrum and vertebrae.

sacrum (sāk'rūm) \* [L. *sacer* sacred.] The os sacrum or bone forming termination of vertebral column, usually of several fused vertebrae vertebra or vertebrae to which pelvic girdle is attached.

sagitta (sāj'tā) \* [L. *sagitta* arrow] An elongated otolith in sacculus of teleosts genus of arrow worms.

sagittae (sāj'tē) \* *plur* [L. *sagitta*, arrow] The inner genital valves in Hymenoptera.

sagittal (sāj'tāl) \* [L. *sagitta* arrow] *Appl.* the suture between parietals *appl.* section or division in median longitudinal plane.

sagittate (sāj'tāt) \* [L. *sagitta*, arrow] Shaped like head of an arrow *appl.* leaf.

sagittocyst (sāj'tō'sist) \* [L. *sagitta*, arrow Gk. *kystis* bladder] A cyst or capsule in turbellarians containing a single spindle.

**saliva** (sāl'vā) *n.* [L. *saliva*, spittle.] A fluid containing ptyalin secreted by buccal glands.

**salivarium** (sāl'vā rŭm) *n.* [L. *saliva*, spittle.] Recess of preoral food cavity with opening of the salivary duct in insects.

**salivary** (sāl'vār) *a.* [L. *saliva*, spittle.] *Part* saliva *appl.* glands, ducts etc. *appl.* chromosomes conspicuous in salivary gland cells of Diptera giant chromosomes

**salivation** (sāl'vā shŭn) *n.* [L. *saliva*, spittle.] Flow of saliva into mouth.

**salpingian** (sāl'pīn'jān) *a.* [Gk. *salpingx* trumpet.] *Part* Eustachian or Fallopian tube.

**salpingopalatine**,—*part* Eustachian tubes and palate.

**salpinx** (sāl'pīngks) *n.* [Gk. *salpingx* trumpet.] Eustachian, or Fallopian, tube.

**salsuginous** (sāl'sŭj'ŭnŭs) *a.* [L. *sal* salty *gignere* to grow.] Growing in soil impregnated with salts

**saltati** *n.*—mutation, *q. v.*

**saltatorial** (sāl'tō'rīāl) *a.* [L. *salto* to leap.] Adapted for or used in, leaping *appl.* limbs of jumping insects saltatory

**salt d animals**,—those which have survived certain diseases but remain infective and provide source of material for preventive inoculation.

**saltigrade** (sāl'tīgrād) *a.* [L. *salto* to leap *gradus* step.] Moving by leaps, as some insects.

**samara** (sām'ārā) *n.* [L. *somera* seed of elm.] A winged indehiscent fruit, as of elm and ash

**samaroid** (sām'aroid) *a.* [L. *somera* seed of elm Gk. *oides* f rm.] Samariform resembling a samara

**sanguicolous** (sānggwīk'ŭlŭs) *a.* [L. *sanguis* blood *colere* to inhabit.] Living in blood of animals.

**sanguiferous** (sānggwīf'ērŭs) *a.* [L. *sanguis* blood *ferre* to carry.] Conveying blood, as arteries veins.

**sa gulvorous** (sānggwā'v'ērŭs) *a.* [L. *sanguis* blood *vorare* to devour.] Living on blood.

**sanidaste** (sān'idās'tēr) *n.* [Gk. *sanidastion* panel *aster* star] A slender rod like specul with spines at intervals.

**Santorini's cartilages** [G D *Santorini* Italian anatomist]. The corniculate cartilages.

**Santorini's duct**,—the accessory pancreatic duct.

**saphena** (sāf'ēnā) *n.* [Gk. *saphenae* clear] A conspicuous vein of leg extending from foot to femoral vein.

**sapheno** (sāf'ēn) *a.* [Gk. *saphenae* clear] *Part* internal or external saphena *appl.* branch of femoral nerve.

**saprobic** (sāprōb'ik) *a.* [Gk. *sapros* rotten *bios* life.] Living on decaying organic matter *appl.* certain Protista.

**saprobiont** (sāprōb'iont) *n.* [Gk. *sapros* rotten *bios* living] A saprophyte, or a saprozoote a saprophagic organism.

**saprogenic** (sāp rōj'ēn'ik) *a.* [Gk. *sapros* rotten *genes* producing] Causing decay resulting from decay

**saprop li** (sāp rōp'ēl'ik) *a.* [Gk. *sapros* rotten *phalos* mud.] Living among debris of bottom ooze.

**saprophag** (sāp rōf'ā) *n.* [Gk. *sapros* rotten *phagē* to eat.] An organism which feeds on decaying organic matter a saprophagic organism saprobiont.

**saprophyt** (sāp rōf'it) *n.* [Gk. *sapros* rotten *phyton* plant.] A plant which lives on dead and decaying organic matter a saprophytic organism f autophyte.

**saprozoic** (sāp rōzō'ik) *a.* [Gk. *sapros* rotten *zōon* animal.] Living on dead or decaying organic matter *appl.* animals.

**saprozōit** (sāprōzō'it) *n.* [Gk. *sapros* rotten *zōon* animal.] A animal which lives on dead or decaying organic matter a saprozoic organism.

**sap wood**,—the more superficial, paler softer wood of trees; alburnum.

**sarcenchyma** (sár'ēng'kímā) *n.* [Gk. *sarx* flesh *enchyma* infusion.] Parenchyma whose ground substance is granular and not abundant.

**sarcocarp** (sár'kōkarp) *n.* [Gk. *sarx* flesh; *karpē* fruit.] The fleshy or pulpy part of fruit.

**sarcocystin** (sár'kōs'tin) *n.* [Gk. *sarx* flesh *kystis* bladder] A toxin derived from Sarcosporidia.

**sarcocyt** (sár'kōs't) *n.* [Gk. *sarx*, flesh *kystis* hollow] The middle layer of ectoplasm in Gregar inia.

**sarcode** (sár'kōd) *n.* [Gk. *sarx* flesh.] The body protoplasm of Protista.

**sarcoderm** (sár'kōd'ērm) *n.* [Gk. *sarx* flesh *derma* skin.] The fleshy layer between seed and external covering.

**sarcodi** (sár'kōd'ik) *a.* [Gk. *sarx* flesh.] *Part.* or resembling protoplasm.

**sarcodictium** (sár'kōd'ikt'itum) *n.* [Gk. *sarx* flesh *diktynon*, net.] The second or network protoplasmic zone of Radiolaria.

**sarcogeni** (sár'kōjēn'ik) *a.* [Gk. *sarx* flesh *gēnes* producing] Flesh-producing.

**sarcoid** (sár'kōid) *a.* [Gk. *sarx* flesh *oides* form.] Fleasy as sponge tissue.

**sarcolemma** (sár'kōlēm'a) *n.* [Gk. *sarx* flesh *lemma*, skin.] The tubular sheath of a muscle fibre.

**sarcolyte** (sár'kōlit) *n.* [Gk. *sarx* flesh *lytēr* loosening] A non-nucleated muscle fragment undergoing phagocytosis in development of insects transient striated cell in thymus myoid cell.

**sarcoma** (sár'kōmā) *n.* [Gk. *sarx* flesh.] A fleshy excrescence or tumour usually malignant.

**sarcomatrix** (sár'kōmā'trīks) *n.* [Gk. *sarx* flesh *L. matrix* womb.] The fourth protoplasmic zone of radiolarian, the seat of digestion and assimilation.

**sarcomer** (sár'kōmēr) *n.* [Gk. *sarx* flesh *meros* part.] A transverse portion of sarcoyle between telophragmata incoenoma coenma.

**sarcophagous** (sár'kōf'agōs) *a.* [Gk. *sarx* flesh *phagōn* to eat.] S b-slating on flesh.

**sarcoplasm** (sár'kōplāzm) *n.* [Gk. *sarx* flesh *plasma* mould.] The longitudinal interstitial substance between fibrils of muscular tissue.

**sarcosoma** (sár'kōsō'mā) *n.* [Gk. *sarx* flesh *soma*, body] The fleshy *spp.* skeletal portion of body.

**sarcosperm** (sár'kōspēm) *n.* [Gk. *sarx* flesh *sperma*, seed.] Sarcoderm.

**sarcostyl** (sár'kōstīl) *n.* [Gk. *sarx* flesh *stylas* pillar] A fibril or muscle column of muscular tissue a dactylozooid column.

**sarcotesta** (sár'kōtēs'tā) *n.* [Gk. *sarx* flesh *L. testa*, shell] Softer fleshy outer portion of testa.

**sarcotheca** (sár'kōthē'kē) *n.* [Gk. *sarx* flesh *thēka* box.] The sheath of a hydrosan sarcoyle.

**sarcous** (sár'kōs) *a.* [Gk. *sarx* flesh.] *Part.* flesh muscle tissue.

**sarmentaceus** (sármēntā'shūs) *a.* [*L. sarmentum*, twig] Having slender prostrate stems or runners sarmentose sarmentous.

**sarmentum** (sármēntum) *n.* [*L. sarmentum* twig] The slender stem of climber or runner.

**sarothrum** (sár'ōthrūm) *n.* [Gk. *sarōthron* broom.] Enlarged hairy tarsal joint of bee, pollen-brush.

**sartorius** (sárt'ōrīōs) *n.* [*L. sartor* tailor] A thigh muscle which enables legs to be moved inwards.

**satellit** (sāt'ēlīt) *n.* [*L. satelles* attendant.] The second of any pair of individuals of catenoid colony in pseudoconjugation of Gregarinida of primitive short segment constructed from the rest of chromosome *spp.* cells closely applied to others as Schwann sheath to modulatory sheath.

**saurian** (sár'īān) *a.* [Gk. *sauros* lizard.] *Part.* or resembling lizard.

**saurogathou** (sōrōg'nāthōs) *a.* [Gk. *sauros* lizard; *gathos* jaw] With saurian arrangement of jaw bones.



**sauroid** (sə'oid) *n.* [Gk. *saurus* lizard *side* form.] Resembling a saurian or part of a saurian *appl* cells normoblasts, *p*.

**savanna** (sə'vā'nə) *n.* [Sp. *sabana*.] Subtropical or tropical grassland with xerophilous vegetation and scattered trees transitional zone between grasslands and tropical rain forests.

**saxicavous** (səksək'vūs) *a.* [L. *saxum* rock *cavus* hollow] *Appl* rock-borers as some molluscs lithophagous.

**saxicollis** (səksək'ōlīs) *a.* [L. *saxum* rock *colere* to inhabit.] Living or growing among rocks: saxicolous.

**scaberulous** (skābēr'ūlūs) *a.* [L. *scaber* rough] Somewhat rough.

**scabrat** (skāb'rāt) *a.* [L. *scaber* rough.] Rough with a covering of stiff hairs, scales, or points scabrous.

**scala** (skā'lā) *n.* [L. *scale* ladder] Any of three ladder-like canals in cochlea of ear.

**scalariform** (skālēr'fōrm) *a.* [L. *scale* ladder *formis* shape.] Ladder-shaped *appl* vessels or tissues having bars like a ladder *appl* series of pits in cell walls *appl* conjugation between parallel filaments in *Spyrogyra*.

**scale** (skāl) *n.* [A.S. *scāle* bell husk] A flat small plate-like external structure *dermal* or *epi* *dermal* a bony horny or chitinous outgrowth bract of a catkin ligule of certain flowers modification of a stellate hair on certain leaves.

**scale-bark**—bark *n* irregular sheets or patches due to irregular or dipping formation of phellogen of *n* g bark.

**scale leaf**—a bud-protecting cataphyllary leaf

**scalene** (skālēn') *a.* [Gk. *skalenos* uneven.] *Peri* scalene muscles *appl* tubercle on first rib for attachment of scalenus anticus or anterior

**scal nua** (skālē nūs) *n.* [Gk. *skalenos* uneven.] One of three neck muscles—*scalenus posticus, medius, anticus*

**scalp** (skālp) *n.* [M.E. *scēp*] The skin and subcutaneous tissues of surface of head where hair grows.

**scapella** (skāpē'lā) *n.* *p/v* [L. *scal* *pellere* small knife] Paired pointed processes, parts of maxillae of *Diptera*.

**scalpriform** (skālp'rifōrm) *a.* [L. *scalprum* chisel *formis* shape.] Chisel shaped *appl* incisors of rodents.

**scalprum** (skālp'rūm) *n.* [L. *scalprum* chisel.] The cutting edge of an incisor

**scandent** (skān'dēnt) *a.* [L. *scandere* to climb.] Climbing by stem-roots & tendrils trailing as grasses over shrubs.

**scansorial** (skānsō'riāl) *a.* [L. *scandere* to climb.] Formed or adapted for climbing habitually climbing.

**scape** (skāp) *n.* [Gk. *skapos* stalk.] A flower-stalk arising at or under ground a radical peduncle, as corolla *p* structure formed by two basal segments of antennae of *Diptera* an epigynal structure protecting vulva in spiders *scapus*, *p*.

**scapha** (skā'fā) *n.* [L. *scapha* boat.] Narrow curved groove between helix and antihelix of ear

**scaphium** (skāf'ium) *n.* [Gk. *skaphe* boat] Process of ninth (copulatory) segment of male *Lepidoptera*; anterior Weberian ossicle keel of leguminous flower

**scaphocephalic** (skāf'ōkēfāl'ik -ēf) *a.* [Gk. *skaphe* boat *brachale* head.] With narrow elongated skull

**scaphocerite** (skāf'sērīt) *n.* [Gk. *skaphe* boat *cerus* horn.] Scale-like exopodite of second antenna of *Decapoda*.

**scaphognathite** (skāf'gnāth'it) *n.* [Gk. *skaphe* boat *gnathos* jaw.] Exopodite of second maxilla of *Decapoda*, regulating flow of water through respiratory chamber *baker*

scaphoid (skə'foid) *n.* [Gk. *skaphe* boat; *eidos* form.] Shaped like boat *appl.* carpal and tarsal bones *appl.* [occasionally pterygoid bone. *n.* On navicular] scapholunar (skə'foidlū'nār -loo) *n.* [Gk. *skaphe* boat L. *luna* moon.] Part, scaphoid and lunar carpal bones, or those bones fused scapholunatum. scapiform (skə'pifōrm) *n.* [Gk. *skaphe* stalk L. *forma*, shape] Scapoid resembling scape. espos (skə'pōs) *n.* [Gk. *skaphe* stalk.] Consisting of, or in form of a scape. scapula (skə'pūlə) *n.* [L. *scapula*, shoulder-blade.] The shoulder blade name given to various structures suggestive of shoulder blade as tegula, patagium, mesothoracic pteron, fore-leg trochanter of certain insects in Crinoides, proximal plat of ray that has an articular facet for arm. scapular (skə'pūlər) *n.* [L. *scapula* shoulder-blade.] Part scapula. *n.* A feather growing from shoulder and lying laterally along back. scapulus (skə'pūləs) *n.* [L. *dim.* of *scapus* stem.] Modified sub-marginal region in certain sea-anemones. capus (skə'pōs) *n.* [L. *scapus* stem, stalk.] A scape stem of feather hair shaft part of column below and including parapt in sea anemones. scurfkin (skə'fkin) *n.* [A.S. *scorfa*, scurf.] The cuneus or epidermis. scarious (skə'riūs) *n.* [F. *scarieu* membranous] Thin, dry membranous scaly or scurfy schindyles (skindilē's) *n.* [Gk. *schindyles* fissure.] Articulation in which thin plate of bone fits into cleft or fissure, as that between vomer and palatines. schistocytes (skistō'sēts) *n. pl.* [Gk. *schistos*, to cleave *lytes* hollow] Fragments of erythrocytes blood corpuscles undergoing fragmentation microcytes poikilocytes

schl ocarp (skl'ōkarp) [Gk. *schleris* to cleave *karpos* fruit.] A dry seed vessel which splits into two or more one-seeded carpels or mericarps. schizothroal (skithōtrō'al) [Gk. *schleris* to cleave *thros* body surface.] With lenses separate and cornea not continuous *appl.* certain trilobite eyes. schisocoele (skithō'sēl) *n.* [Gk. *schleris*, to cleave *koilos* hollow] Coelom formed by splitting of mesoblast into layers. schl ogamy (skithōg'āmī) *n.* [Gk. *schleris* to cleave *gamos* marriage.] Fusion into a sexual and a non-sexual zoid in some Polychaeta. schi ogenesis (skithō'yēnē'sis) *n.* [Gk. *schleris*, to cleave *genesis* descent.] Reproduction by fission. schisogen tic (skithōjēnē'tik) *n.* [Gk. *schleris* to cleave *genesis* descent.] Reproducing or formed by fission *appl.* resin ducts *appl.* spaces formed by delamination of adjacent cell-walls schirogenous schirognathous (skithōg'nāthōs) *n.* [Gk. *schleris* to cleave *gnathos* jaw] Having vomer small and pointed in front and maxillopalatines not united with each other and vomer *appl.* type of palate found in some Carinaria, *g.* in pecten. schivog ny (skithōg'ny) *n.* [Gk. *schleris* to cleave *gamos* of spring] Cleavage multiplication in protozoa. schiz kineta (skithōkīnē'tē) *n.* [Gk. *schleris*, to cleave *kineta* movable] Motile vermiform stage in life-history of Haemaphysarina. schizont (skithōnt) *n.* [Gk. *schleris* to cleave *onta*, beings.] A stage following trophozoite stage of parasitic Sporozoa, reproducing in host by multiple fission. schiz at blast (skithōn'tōblāst) *n.* [Gk. *schleris* to cleave *onta*, beings *blastos* bud.] A cytomer of Caryotropha.

**schizontocytes** (sklzn'tōts) *n. pl.* [Gk. *schizo* to cleave *on* being *cytos* hollow] Cytoemes into which a schizont divides and which themselves divide into clusters of merozoites.

**schizopelmons** (skl'ōpē'mōn) *n.* [Gk. *schizein* to cleave *pelmon*, sole of foot.] With two separate flexor tendons connected with toes as some birds.

**schizophyte** (skl'ōfīt) *n.* [Gk. *schizo* to cleave *phyton* plant.] A plant which reproduces solely by fission, as bacteria, yeasts blue green algae.

**schizopod stage**,—that stage in development of a decapod crustacean larva when it resembles an adult *Myris* in having exopodite and endopodite to all thoracic limbs.

**schizorhinal** (skl'ōr'ōnāl) *n.* [Gk. *schizein* to cleave *rhis* nose.] Having external nasal opening elongated and posterior border angular or slit-like *opp.* holorhinal.

**schizostele** (skl'ōstē'lē) *n.* [Gk. *schizein* to cleave *stēle* post.] One of a number of strands formed by division of pterome of stem.

**schizostely** (skl'ōstē'lē) *n.* [Gk. *schizein* to cleave *stēle* a post.] Condition of stem in which pterome gives rise to number of strands each composed of two vascular bundle axels.

**schizothecal** (skl'ōthē'kāl) *n.* [Gk. *schizein* to cleave *thēke* case.] Having scale-like horny tarsal plates.

**schizozoite** (skl'ōzō'īt) *n.* [Gk. *schizein* to cleave *zōon* animal.] A merozoite formed from each segment of a dividing schizont.

**Schwann sheath** {Tb. Schwann German anatomist}. Primitve sheath or neurolemma. *q.*

**sciaphyt** —*sciaphyte q.v.*

**sciatic** (skī'ik) *n.* [Gk. *ischion* hip-joint.] *Perf.* hip region *appl.* artery nerve veins, etc.

**scion** (sē'ōn) *n.* [F. *scion* shoot] A branch or shoot for grafting purposes.

**sciophilous**,—*sciophilous q.v.*  
**scisalparity** (skī'pār'itē) *n.* [L. *scis* to cleaving *parer* to beget.] Schizogonosis.

**sclera** (sklē'rā) *n.* [Gk. *scleros* hard.] The tough, opaque fibrous tunic of the eyeball sclerotic coat sclerotica. scleratogenous layer —strand of the fused sclerotomes formed along the neural tube later surrounding the notochord.

**sclere** (sklē'rē) *n.* [Gk. *scleros* hard.] A small skeletal structure; sponge spicule.

**sclerid** (sklē'rēd) *n.* [Gk. *scleros* hard *oides* form.] Any cell with a thick lignified wall a sclerenchymatous cell a stone cell.

**sclerenchyma** (klē'rēng'kīmā) *n.* [Gk. *scleros* hard *enchyma* infusion.] Hard tissue of coral; plant tissue of thickened and of hard cells of vessels.

**sclerid**,—*sclerid.*

**sclerites**,—*scleroproteins q.v.*

**sclerite** (sklē'rīt) *n.* [Gk. *scleros* hard.] Calcareous plate or spicule chitinous plate part of exoskeleton.

**scler base** (sklē'rōbās) *n.* [Gk. *scleros* hard *basis* base.] The calcareous axis of Alcyonaria.

**scleroblast** (sklē'rōblāst) *n.* [Gk. *scleros* hard *blastos* bud.] A sponge cell from which a sclere develops an immature sclerid.

**scleroblastoma** (sklē'rōblāstōmā) *n.* [Gk. *scler* hard *blastoma* bud.] Embryonic tissue involved in development of skeleton.

**scleroblastic** (sklē'rōblāst'ik) *n.* [Gk. *scleros* hard *blastos* bud.] *Appl.* skeletal-forming tissue.

**sclerocarp** (klē'rōkār'p) *n.* [Gk. *scleros* hard; *karpos* fruit.] The hard seed coat or stone usually the endocarp of ucculent fruit.

**sclerocaulis** (sklē'rōkō'līs) *n.* [Gk. *scleros* hard *caulis* stalk.] Condition of excessive skeletal structure in a stem.

**sclerocornal** (sklē'rōkō'r'nāl) *n.* [Gk. *scler* hard L. *cornu* cornu] *Perf.* cornea and sclera.

- scleroderm** (sklērōdērm) *n.* [Gk. *skleros* hard *derma*, skin.] An indurating integument skeletal part of corals.
- sclerodermis** (sklērōdēr'mītis) *n.* [Gk. *skleros* hard *derma* skin.] With an external skeletal structure.
- sclerodermis** (sklērōdēr'mīt) *n.* [Gk. *skleros* hard *derma*, skin.] The hard outer covering of an arthropod segment.
- sclerogen** (sklērōjēn) *n.* [Gk. *skleros* hard *genes* producing] Woody tissue in plant cells.
- sclerogen** (sklērōjēn'ik) *sclerogen* *ous* (sklērōjēn'ūs) *n.* [Gk. *skleros* hard *genes* producing] Producing lignin.
- scleroid** (sklērōid) *n.* [Gk. *skleros* hard *eidos* form.] Hard skeletal.
- scleromanix** (sklērōmā'nīngks) *n.* [Gk. *skleros* hard *manix* meninges men brane.] The dura mater.
- sclerophyll** (sklērōfīl) *n.* [Gk. *skleros* hard *phyllon*, leaf] A plant with hard leaves *sclerophyllous* plant.
- sclerophyll** *n.* (sklērōfīl'ūs) *n.* [Gk. *skleros* hard *phyllon* leaf.] Appl. leaves resistant to drought through having much sclerenchymatous tissue and reduced intercellular spaces hard-leaved.
- sclerophyll** (sklērōfīl'ūs) *n.* [Gk. *skleros* hard *phyllon*, leaf.] Condition of excessive skeletal structure in leaves.
- scleroprotein** (sklērōprō'tēina) *n.* *plu.* [Gk. *skleros* hard; *protein* fine.] Albuminoid group of proteins occurring in connective, skeletal and epidermal tissues, as ossein, collagen, gelatin, chondrin, elastin, keratin etc.
- scleroseptum** (sklērōseptūm) *n.* [Gk. *skleros* hard *L. septum* division.] A radial vertical wall of calcium carbonate in madrepore corals.
- sclerosis** (sklērō'sis) *n.* [Gk. *skleros* hard.] Hardening by increase of connective tissue or of lignin.
- sclerot** (sklērō't) *n.* [Gk. *skleros* hard.] Sclerotic.
- sclerotestis** (sklērō'tē'stīs) *n.* [Gk. *skleros* hard *L. testis* shell.] The hard lignified inner layer of a testis.
- sclerotic** (sklērō'tik) *n.* [Gk. *skleros* hard.] The sclera. *a.* Indurated containing lignum *part. sclerotic* *part. sclera*.
- sclerotid ossicles**, — ring of small bones round sclera of birds.
- sclerotoid** (sklērō'tōid) *n.* [Gk. *skleros* hard *eidos* form.] *Part* sclerotomy.
- sclerotin** (sklērō'tīm, -tīm) *n.* [Gk. *skleros* hard.] Resting, dormant, or winter stage of some fungi when they become mass of hardened mycelium or of waxy protoplasm.
- sclerotome** (sklērō'tōm) *n.* [Gk. *skleros* hard *tema* cutting] A partition of connective tissue between two myomeres mesenchymatous tissue destined to form vertebra.
- sclerous** (sklērō's) *n.* [Gk. *skleros* hard.] Sclerotal scleroid.
- scobina** (skōb'īnā) *n.* [*L. scobina*, file.] Pedicel of spikelet of grasses.
- scobinate** (skōb'īnāt) *n.* [*L. scobina* file.] Having a rasp-like surface.
- scolecoid** (skōlē'ōid) *n.* [Gk. *skoles* worm.] *Part* scolex; scolecoïd.
- scoleciform** (skōlē'ōifōrm) *n.* [Gk. *skoles* worm *L. forma* shape.] Like scolex, scolecoïd.
- scolecite** (skōlē'īt) *n.* [Gk. *skoles* worm.] Vermiform body branching from mycelium of *Discomyces*.
- scolex** (skōlēks) *n.* [Gk. *skoles* worm.] The head or anterior end of tape-worm.
- scolite** (skōl'īt) [Gk. *skoles* worm *lithos* stone.] A fossil worm burrow.
- scol pal** (skōlēpāl) *n.* [Gk. *skoles* stake *palē* struggle.] Vibratile central peg-like portion of scolophore.

scophor (skō'fō) *n* [Gk. *skophos* stake; *pherein* to bear] Chordotonal sensilla nerve end organ of auditory apparatus of insects.

scopidium (skō'pīd'īd'ium) *n*. [Gk. *skophos* stake; *idion* dim] A chordotonal sensilla in insects.

scelus (skō'fōs) *n* [Gk. *skelos* thorn.] A horny process of some insect larvae.

scope (skō'pā) *n*. [L. *scopa* brush.] A pollen-brush of bees.

scopate (skō'pāt) *a*. [L. *scopa* brush.] Having a tuft of hairs like brush scopiferous.

scopiform (skō'pīfōrm) *a*. [L. *scopa*, brush *forma*, shape.] Brush-like.

scopula (skōp'ūlā) *n*. [L. *scopula*, small brush] A small tuft of hairs brush-like adhesive organ formed by cilia in certain pentrichous ciliates a needle-like sponge specula with brush like head in climbing spiders an adhesive tuft of club-like hairs on each foot replacing third claw

scopulate (skōp'ūlāt) *a*. [L. *scopula* small brush.] Like brush.

scopuliferous (skōp'ūlīf'ērūs) *a*. [L. *scopula* small brush *ferre* to carry] Having small brush like structure.

scopuliform (skōp'ūlīfōrm) *a*. [L. *scopula*, small brush *forma*, shape] Resembling small brush.

scorpioid (skōr'pīōid) *a*. [Gk. *skorpias* scorpion *eidos* form.] Circumst. appl. inflorescence resembling scorpion.

scorpioid cyme—a unisexual cymose inflorescence in which the staminate axes are developed right and left alternately

scotoma (skōtō'ma) *n*. [Gk. *skotos* darkness] A spot where vision is absent within the visual field blind spot.

scotopic (skōtōp'īk) *a* [Gk. *skotos* darkness *ops* eye] Having or pert. dark-adapted eye *opp* photopic.

scrobe (skrōb) *n*. [L. *scrobis* ditch] A groove on either side of beetle rostrum

scrobicula (skrōb'īk'ūlā) *n* [L. *dim* of *scrobis* ditch.] The smooth area round base of echinoid test.

scrobicular (skrōb'īk'ūlār) *a* [L. *dim* of *scrobis* ditch.] In region of scrobicula.

scrobiculate (skrōb'īk'ūlāt) *a*. [L. *dim* of *scrobis* ditch.] Marked with little pits or depressions.

scrobiculae,—scrobacula, or scrobiculus.

scrobiculus (skrōb'īk'ūlūs) *n* [L. *dim* of *scrobis* ditch.] A pit or depression.

scrobiculus cordis,—pit of stomach.

scrotal (skrō'tāl) *a*. [L. *scrotum*] Pert. or in region of scrotum.

scrotum (skrō'tūm) *n* [L. *scrotum*.] External sac or sacs containing testicles, in mammals covering of testis in insects.

scurf (skrōf) *n* [A.S. *scrof*] Scaly skin dried outer skin peeling off in scales scaly epidermal covering (some leaves).

scuta,—*pl*s of scutum *q.s*

scutal (skū'tāl) *a*. [L. *scutum* shield.] Pert. a scutum.

scutate (skū'tāt) [L. *scutum* shield.] Protected by large scales or horny plates.

cute (skūt) *n*. [L. *scutum* shield.] An external scale as of repelle, fish or scaly insect scale-like structure bony plat separating snout from mandible bone from tympanic cavity

scutella (skū'tēl'ā) *n* [L. *scutellum*, small shield.] A scutellum or shield-like structure *pl*s of scutellum

scutellar (skū'tēl'ār) *a*. [L. *scutellum* small shield.] Pert. scutellum.

scutellate (skū'tēl'at skū'tēl'āt) *a*. [L. *scutellum* small shield.] Shaped like small shield scutelliform.

scutellation (skū'tēl'āshon) *n* [L. *scutellum* small shield] Arrangement of scales, as on tarsus of bird.

scutelliform,—scut lat

scutellous (skū'tēl'ūs) *a*. [L. *scutellum* small shield *gerere* to bear] Furnished with scutella or scutellum.

**scutellipantar** (sküt'iplin'tär) *n.* [*L. scutellum* small shield *planta* sole of foot.] Having tarsus covered with small plates or scutella.

**scutellum** (sküt'el füm) *n.* [*L. scutula* *Arms*, small shield.] A tarsal scale of birds posterior part of insect notum; the single massive cotyledon lying next starchy endosperm in seed of maize; development of part of cotyledon which separates embryo from endosperm in seed of grasses.

**scutiferous**—**scutigerous**.

**scutiform** (sküt'iförm) *a.* [*L. scutum* shield *forma* shape.] Shaped like a shield *appl.* boating hull of Salmira.

**scutigerous** (sküt'ig'ëros) *a.* [*L. scutum* shield, *gero* to bear.] Bearing a shield-like structure *scutiferous*.

**scutiped** (sküt'ipid) [*L. scutum* shield, *pes* foot.] Having foot or part of it covered by scutella.

**scutum** (sküt'üm) *n.* [*L. scutum*, shield.] Broad apex of style as in *Asclepiadeae* one of eight plates surrounding antheridium / *Chama* a shield-like plate, horny bony or cartilagenous, developed to integument form or modified spine overhanging aperture in some *Cheilostomata* middle sclerite of insect notum dorsal shield of tick.

**scyphiferous** (sift'ëros) *a.* [*L. scyphus* cup *fero* to bear.] Bearing scyphi as some lichens.

**scyphiform** (sift'iförm) *a.* [*L. scyphus* cup *forma*, shape.] Shaped like a cup *scyphoid*.

**scyphistoma** (sift'stösm) *n.* [*Gk. scyphus* cup *stoma*, mouth.] A scyphula, the scyphozoan polyp stage in development of *Aurelia* hydra-tuba.

**scyphoid** (sift'oid) [*Gk. scyphus* cup *eidos* form.] Cup-shaped *scyphiform*.

**scyphose** (sift'ös) [*L. scyphus* cup.] Cup-shaped *scyphiform*.

**scyphula** (sift'ülä) *n.* [*L. stem.* of *scyphus*, cup.] A scyphozoma.

**scyphulus** (sift'ülös) *n.* [*Dim.* of *L.*

*scyphus* cup.] A small cup-shaped structure.

**scyphus** (sift'ös) *n.* [*L. scyphus* *Gk. scyphos* cup.] Cup of nectaries funnel-shaped corolla cup-shaped expansion of pedicel in some lichens.

**sebaceous** (sëbä'ëts) *a.* [*L. sebum*, tallow.] Containing or secreting fatty matter *appl.* glands.

**biferous** (sëbif'ëros) *a.* [*L. sebum* tallow *fero* to carry.] Conveying fatty matter.

**sebil** (sëbif'ik) [*L. sebum*, tallow *facere* to make.] Sebiparous *collectorial* *g.s.*, *appl.* glands in insects.

**sebiparous** (sëbip'ëros) *a.* [*L. sebum*, tallow *parere* to beget.] Secreting fatty matter.

**sebum** (së'büm) *n.* [*L. sebum* tallow.] The secretion of sebaceous glands, consisting of fat and leucosterin.

**secodont** (sek'odnt) *a.* [*L. secare* to cut *Gk. odon* tooth.] Furnished with teeth adapted for cutting.

**secondary** (sek'ondär) *a.* [*L. secundus* second.] Second in importance or in position arising not from growing point, but from other tissue *biological* *n.* A forearm quill-feather of bird wing an insect hind-wing.

**secondary bud**,—an axillary bud accessory to normal one.

**secondary capitula**,—the small cells rising from each capitulum of *Chama*.

**secondary growth**,—development of secondary meristem or cambium producing new tissue on both sides, as in woody dicotyledons.

**secondary meristem**,—*phellogen*.

**secondary prothallium**,—a tissue produced in megaspore of *Selaginella* after true prothallium is formed.

**secondary roots**,—branches of primary root, arising within its tissue, and in turn giving rise to tertiary roots roots arising at other than normal points of origin.

**secondary pores**,—a small or ab-jointed spore an ascospore.

**secondary tissue**,—tissue formed through *phellogen*, externally cork, and internally *phellogen*.

**secondary wood** — wood formed from cambium.

**crete** (sek're'ti) *n* *plu* [L. *secreto* separated.] Any products of a secretory process all the secretions.

**secretin** (sek're'tin) *n* [L. *secremare* to separate.] A chemical substance or hormone produced in intestinal mucosa membrane and which stimulates secretion of pancreatic juice.

**secreti** (sek're'ti) *n* [L. *secreta* separation.] Substance or fluid which is separated and elaborated by cells or glands process of such separation.

**secretitious** (sek're'ti-ti) *a* [L. *secremare* to separate.] Produced by secretion, *appl* substance or fluid.

**secretory** (sek're'to-ri) *a* [L. *secremare* to separate.] Effecting or *per* the secretion secreting.

**sectile** (sek'til) *a*. [L. *secare* to cut.] Cut into small partitions compartments.

**sectorial** (sek'to-ri-al) *a*. [L. *sector* cutter.] Formed or adapted to cutting as certain teeth *appl* chinsura when two different tissues extend from centre to periphery wedge of one tissue inserted in the other.

**second** (sek'und) *a*. [L. *secundus* following.] Arranged on one side *appl* flowers or leaves on stem.

**secundiflorous** (sek'und'i-flō-ri) *a* [L. *secundus* following *fl* flower.] Having flowers on one side of stem only.

**secundine** (sek'und-in) *n* [L. *secundus* following.] The second coat of ovule lying with primum.

**secundia** *s*,—foetal membranes collectively placenta and membranes expelled after birth afterbirth.

**secondly** (sek'und-i) *adv* [L. *secundus* following.] On one side of a stem axis.

**sedentary** (sed'en-ti-ri) *a*. [L. *sedere* to sit.] Not free-living *appl* animals attached by base to some substratum not migratory.

**seed** (sēd) *n* [A.S. *seed* seed.] A mature fruit containing an embryo ready for germination under suitable conditions semen. *v* To introduce micro-organisms into a culture medium.

**seed-bud** —an ovule.

**seed-coat**,—the testa.

**seed leaf**,—seed lobe or cotyledon.

**seed-plant**,—a seed bearing plant.

**seed-stalk**,—the funicle.

**seed-vessel**,—a structure containing seed as a pod.

**Seessel's pouch** [*A. Seessel* American embryologist]. A dorsal endodermal diverticulum from anterior end of fore-gut behind buccopharyngeal membrane.

**segment** (seg'mēt) *n* [L. *segmen* piece.] A division formed by cleavage of an ovum part of an animal or of a jointed appendage metamere division of leaf if cleft nearly to base portion of a chromosome.

**segmental** (seg'mēn-tāl) *a*. [L. *segmen* piece.] Of the nature of segment *per* segment.

**segmental art-ries** —diverticula from dorsal aorta arising in spaces between successive somites.

**segmental duct**,—an embryonic nephridial duct which gives rise to Wolffian Mullerian duct.

**segmental interchange** —exchange of non homologous segment as between two chromosomes mutual translocation.

**segmental organ**, —an embryonic excretory organ nephridium.

**segmental papilla** —conspicuous pigment spots by which true segments may be recognized in leeches.

**segmental** (seg'mēn-tāl) *n* [L. *segmentum* piece.] The division or plating into segments or portions cleavage of an ovum.

**segmentation cavity** —blastocoel or central cavity formed at an early state of egg cleavage.

**segmentation nucleus**, —body formed by union of male and female pronuclei in fertilization of ovum.

**segregation** (səg' ēg' ahn) *n* [L. *segregare* to separate.] Separation of parental chromosomes at meiosis and dissociation of paternal and maternal characters separation of genes.

**seismosynthesis** (sēsmōs'ēn'sis) *n* [Gk. *seismos* earthquake; *anesthesia* perception.] Perception of mechanical vibrations.

**seismonastri** (sēsmōn'strik) *a*. [Gk. *seismos* earthquake *nastes* pressed close.] Resulting from, or part., stimulus of mechanical shock or vibrations *appl* plant movements.

**sejugous** (sē'jugūs) *a*. [L. *sex* six *jugum* yoke.] With six pairs of leaflets; sejugate.

**selachine** (sē'l'ikīn) *n*. [Gk. *selachos* shark.] A neurohumor of selachians which induces blanching of skin.

**sel nodont** (sēl'nōdōnt) *a*. [Gk. *selene* moon; *odontos* tooth.] *Appl* molars lengthened out antero-posteriorly and curved.

**sel oid** (sēl'oid) *a*. [Gk. *selene* moon *eidos* form.] Crescentic.

**selenotropism** (sēlēmōt'rōpizm) *n*. [Gk. *selene* moon *trope* turn.] Tendency to turn towards moon rays.

**self fertile, self-sterile**,—capable, —incapable,—of being fertilised by its own male elements *appl* hermaphrodite plants and animals.

**self-pollination**, —transference of pollen-grains from anthers to stigma of same flower selfing

**sella turcica** (sē'l'ā tūr'shik) *n*. [L. *sella* saddle *turcicus* Turkish.] Deep depression on superior surface of sphenoidal bone behind tuberculum sellae, the deepest part, fossa hypophyseae, lodging the pituitary body transverse bar formed by union of apodemes of posterior occipites of certain Decapoda.

**sellar** (sē'l'ār) [L. *sella* saddle.] Part pituitary fossa or sella turcica.

**selva** (sēl'j) *n* [Sp *selva* from L. *silva* forest.] Tropical rain forest.

**semati** (sēmāt'ik) *a*. [Gk. *sema*, sign.] Functioning as a danger signal, as warning colours or odours *appl* warning and recognition markings of aposematic, episeomatic parasematic.

**semelography** (sēmēlōg'rāfi) *n* [Gk. *semelion* sign *graphia*, to write.] A description of symptoms.

**sem** (sē'mōn) *a*. [L. *semen* seed.] Fluid composed of secretions of testes and accessory glands, and containing spermatozoa.

**semiamplexicanal** (sēm'iāmplēk'āshōl) *a*. [L. *semi*, half *amplecti*, to embrace *caudis* stem.] Partially surrounding stem.

**semianatropous** (sēm'iānāt'rōpūs) *a*. [L. *semi*, half; Gk. *ana*, up; *trope* turn.] With half-inverted ovule.

**semicaudate** (sēm'ikō dāt) *a*. [L. *semi* half *cauda*, tail.] With tail rudimentary.

**semi ella**,—the two halves of cell, which are interconnected by an isthmus, as in certain green algae.

**semicircular** (sēm'fēr'kūlār) *a*. [L. *semi* half *circularis* circle.] Describing a half-circle *appl* canals of ear labyrinth.

**miclasp** (sēm'iklāsp) *n*. [L. *semi*, half; M.E. *claspere*, to hold.] One of two pophyses which may combine to form the clasper in certain male insects.

**semicomplete** (sēm'ikōmplēt') *a*. [L. *semi* half *completus* filled.] Incomplete *appl* metamorphosis.

**semicylindrical** (sēm'ikūlīn drīkāl) *a*. [L. *semi* half *cylindrus* cylinder.] Round on one side, flat on the other *appl* leaves.

**semifloret** (sēm'iflō rēt) *n*. [L. *semi*, half; *flos* flower.] A semiflorescence or ray of composite flowers.

**semiflorescous** (sēm'iflō'skūlūs) *a*. [L. *semi*, half; *florescens* small flower.] Having ligulate florets.

**semigamy**—hemigamy *q.v*



- milligneous (sēm'lig nēūs) *a.* [L. *semi* half *ligneus* wooden.] Partially lignified with stem woody only near base.
- semilocular (sēm'lob'k'ulār) *a.* [L. *semi* half *loculus* compartment.] *Appl.* ovary with incomplete locull.
- semilunar (sēm'lu nār -loo-) *a.* [L. *semi* half *luna* moon.] Half moon shaped *Appl.* branches of internal carotid artery fibrocartilages of knee, ganglia, fascia, lobules of cerebellum valves *Appl.* notch greater sigmoid cavity between olecranon and coronoid process of ulna. *n.* A carpal bone of lunatum.
- semimembranos *s.* (sēm'imēm'brā nō sūs) *n.* [L. *semi* half *membranarius* membranous.] A thigh muscle with flat membrane-like tendon at upper extremity
- semimetamorphosis (sēm'imētā-mōr'fōis) *n.* [L. *semi* half Gk. *metamorphosis* transformation.] Partial or semicomplete metamorphosis.
- seminal (sēm'ināl) *a.* [L. *semen* seed.] *Peri.* semen *Appl.* fluid duct, vesicle *Appl.* cotyledons first roots of grasses.
- seminal ptacle,—spermatheca, *q.v.*
- semination (sēm'inā shōn) [L. *seminatio* sowing] Dispersal of seeds discharge of spermatozoa of insemination.
- minifero (sēm'inif'ērūs) *a.* [L. *semen* seed *ferre* to carry] Secreting or conveying seed or seminal fluid bearing seed
- seminud (sēm'inūd) *a.* [L. *semit* half *nudus* naked] With ovules or seeds exposed.
- seminymp (sēm'inimf) *n.* [L. *semit* half *nympha* nymph.] Stage in development of insects approaching complete metamorphosis.
- semiovalate (sēm'ō vāl) *a.* [L. *semit* half *ovum* egg] Half-oval somewhat oval.
- semioviparous (sēm'ōvip ārūs) [L. *semit* half *ovum* egg *parere* to begot.] Between oviparous and

viviparous as a mare seal whose young are imperfectly developed when born.

semiovoid (sēm'ō void) *a.* [L. *semi* half *ovum* egg Gk. *oides* form.] Somewhat ovoid in shape.

semipalmate (sēm'pāl'māt) *a.* [L. *semi* half *palmus* palm of hand.] If wing toes webbed halfway down.

semiparasite (sēm'pār'āsh) *n.* [L. *semi* half Gk. *parasitos* eating beside another] A partial parasite, as a plant which derives part only of its nutriment from its host.

semipenniform (sēm'pēn'ifōrm) *a.* [L. *semi* half *penna*, feather; *forma*, shape.] *Appl.* certain muscles bearing some resemblance to plume or feather

semipermeabl (sēm'pēr'mēābl) *a.* [L. *semi* half *per* through *membr* to pass.] *Appl.* membrane which permits some dissolved substances to pass but not others although permeable to a solvent, such as water

implacenta (sēm'pīlāsēn tā) *n.* [L. *semit* half *placenta*, flat cake.] A non-deciduate placenta.

semiplume (sēm'ploom) *n.* [L. *semi* half *pluma* feather] A feather with ordinary shaft but downy web

emp pa (sēm'pū pā) *n.* [L. *semi* half *pupa*, puppet.] Larval stage in development of certain insects.

mirecondite (sēm'irēkōn dīt) *a.* [L. *semit* half *condere* to conceal.] Half-concealed as insect head by thorax.

misagittate (sēm'hāj'tāt) *a.* [L. *semi* half *agitta* arrow] Shaped like half arrow head.

semisaprophyte (sēm'isāp rōf'it) *n.* [L. *semit* half Gk. *sapros* rotten; *phyton* plant.] A plant partially saprophytic

mipecal *a.* (sēm'ispē'shēt) *n.* [L. *semit* half *species* particula kind.] A species differentiated from another species as result of geographical isolation

- miaspinalis** (sēm'hpīnāl'is) *n.* [L. *semi* half; *spinalis* spinal.] A muscle of back, also of neck, on each side of spinal column, arising from transverse and inserted into spinous processes.
- semistreptostyle**, — between monostyle and streptostyle with slightly movable quadrate.
- semitendinosus** (sēm'tēn dīnōsūs) *n.* [L. *semi* half *tendo* sinew.] A dorsal muscle of thigh stretching from tuber ischii to tibia.
- semitendinosus** (sēm'tēn dītīs) *n.* [L. *semi* half *tendere* to stretch.] Half tendinous.
- semituberosus** (sēm'tūbērūs) *n.* [L. *semi* half; *tuber* hump.] Having somewhat tuberos roots.
- senescent** (sēn'sēn) *n.* [L. *senescere* to grow old.] Advancing age; aging *appl.* condition of protozoa after many bipartitions.
- senility** (sēn'itē) *n.* [L. *senilis* senile.] Senile derangement vital exhaustion of protozoa.
- sense organ**, — an organ functional in receiving external stimulation receptor
- sensifer us** (sēn'sif'ērūs) *n.* [L. *sensus* sense *ferre* to carry.] Receiving or conveying sense impressions sensiferous.
- sensile** (sēn'sil) *n.* [L. *sensus* sense.] Capable of affecting sense.
- sensilla** (sēn'sil'ā) *n.* [L. *sensus* sense.] A small sense organ.
- sensitive** (sēn'sitīv) *n.* [L. *sensus* sense.] Capable of receiving impressions from external objects reacting to stimulus; *appl.* plants, as Mimosa.
- sensorial** (sēn'sō'riāl) *n.* [L. *sensus* sense.] *Port.* th. sensorium.
- sensorium** (sēn'sō'riūm) *n.* [L. *sensus*, sense.] Set of sensation or consciousness entire nervous system with sense organs; the sensory neuromuscular and glandular system.
- sensory** (sēn'sō'ri) *n.* [L. *sensus* sense.] Having direct connection with any part of sensorium.
- sentient** (sēn'shiēnt) *n.* [L. *sentire*

- to feel.] *Appl.* cells which are sensitive and perceptive.
- sepal** (sēp'al) *n.* [F. *sepals* L. *separare* to separate.] A leaf-like division of calyx.
- sepaled** (sēp'alēd) *n.* [L. *separare* to separate.] Having sepals sepalous.
- pall** (sēp'al'lin) *n.* [L. *separare* to separate.] Like a sepal sepaloid.
- sepalody** (sēp'al'ōdī) *n.* [L. *separare* to separate; Gk. *oides* form.] Conversion of petals or other parts of flower into sepals.
- sepaloid** (sēp'alōid) *n.* [L. *separare* to separate Gk. *oides* form.] Like sepal sepaline.
- sepiculous** (sēp'ik'ūlūs) *n.* [L. *sepi* hedge *colare* to inhabit.] Living in hedges.
- seption** (sēp'īōn) *n.* [Gk. *septon*, cuttle-bone.] Cuttle-bone, or sepi bone, sepiast, sepiostate, septum.
- septa**, — *pl.* of septum.
- septal** (sēp'tāl) *n.* [L. *septum* partition.] *Port.* septum.
- septal fossula**, — a small primary septum which appears to lie in pet in some fossil corals.
- septal neck**, — in nautilus a shelly tube continuous for some distance beyond each septum as support to siphuncle.
- septate** (sēp'tē) *n.* [L. *septum*, partition.] Divided by partitions.
- sept impartit** (sēp'timpār'tit) *n.* [L. *septum*, seven *partes* part.] *Appl.* leaf with seven divisions extending nearly to base.
- septenate** (sēp'tēnāt) *n.* [L. *septem* seven each.] With parts in seven *appl.* seven leaflets of leaf.
- septicidal** (sēp'tīd'āl) *n.* [L. *septum*, division *caedere* to cut.] Dividing through middle of ovary septa dehiscing at septum.
- ptiferous** (sēp'tīf'ērūs) *n.* [L. *septum* partition *ferre* to bear.] Having septa.
- septifolious** (sēp'tīf'ōliūs) *n.* [L. *septum* seven *folium*, leaf.] With seven leaves or leaflets.
- septiform** (sēp'tīf'ōrm) *n.* [L. *septum* partition *forma*, shape.] In form of septum.

septifragal (sɛp'tɪf rāgəl) *a.* [*L. septum* partition *frangere* to break.] With alits as in septicial dehiscence but with septa broken and placentae and seeds left in middle.

septomaxillary (sɛp'tɒmākəl'ārɪ) *a.* [*L. septum* partition *maxilla*, jaw] *Pert.* maxilla and nasal septum *appl.* a small bone in many amphibians and reptiles and in certain birds.

septonasal (sɛp'tɒnāl xāl) *a.* [*L. septum* partition *nasus* nose.] *Pert.* nasal, or internal septum.

septulate (sɛp'tulāt) *a.* [*L. septulum*, small septum.] Having spurious septa.

septulum (sɛp'tuləm) *n.* [*L. septulum* small septum.] A small or secondary septum.

septum (sɛp'tum) *n.* [*L. septum* partition.] A partition separating two cavities or masses of tissue as in fruits, chambered shells, corals, heart, nose, tongue etc.

septum lucidum,—thin inner walls of cerebral hemispheres, between corpus callosum and fornix septum pellucidum.

septum narium,—partition between nostrils septum mobile nasi

septum transversum,—foetal diaphragm ridge within ampulla of semicircular canal.

sera,—*pl.* of serum.

seral (sɛr'āl) [*L. serre* to put in a row] *Pert.* *serre* *appl.* a plant community before reaching equilibrium or climax.

sera (sɛr) *n.* [*L. serre* to put in a row] A successional series of plant communities, as from *presera* to climax a stage in succession.

sericate (sɛr'ɪkāt) sericeous (sɛr'ɪkəs) *a.* [*L. sericus* silken.] with fine close-pressed silky

serific (sɛr'ɪfɪk) *a.* [*L. sericus* *facere* to make.] *a.* *n.*

serology (sɛr'ɒlɒ) *whcy* *Gk. log* study of sera.

serosa (sɛr'ɒ sāl) *Any* serous *m.*

serosa lateral peritoneum false amnion or outer layer of amniotic fold outer larval membrane of insects.

serosity (sɛr'ɒsɪtɪ) *n.* [*L. serum* whey] Watery part of animal fluid condition of being serous.

serotinous (sɛr'ɒtɪnəs) *a.* [*L. serus* late.] Appearing or blooming late in the season flying late in the evening as bats

serous (sɛr'ʊs) *a.* [*L. serum* serum.] Watery *Pert.* serum *appl.* fluid, cells, tissue, glands.

serous alveoli,—alveoli which secrete a watery non-viscid saliva, *appl.* mucous alveoli.

serous m. membran —a thin membrane of connective tissue lining some closed cavity of body and reflected over viscera as mesentery

serozyme (sɛr'ɒzɪm) *n.* [*L. serum* serum *Gk. syno* to leave.] Thrombogenic prothrombin *g.s.*

serpulite (sɛr'pʊlɪt) *n.* [*L. serpulite* small snake *Gk. lissos* smooth] The fossil tube of a polychaete *appl.* *grit* containing fossil worm-tubes.

serra (sɛr'ā) *n.* [*L. serre* saw] Any saw-like structure.

serrate (sɛr'at) [*L. serre* saw] Notched on edge like a saw *appl.* leaves and other structures.

serrate-ciliate —with hairs fringing toothed edges.

serrate-dentate,—with serrate edges themselves toothed.

serratifoliate (sɛr'atɪfɒlɪət) *a.* [*L. serre*, saw *forma*, shape] Like a saw

serration (sɛr'atɪʃən) *n.* [*L. serre* saw] Saw-like formation.

serratorostris (sɛr'atɒr'ɒstrɪs) *a.* [*L. serre* saw; *rostris* beak.] With serrate *l.* birds.

serrator (sɛr'atɒr) *a.* [*L. serre* saw; *rostris* beak.] With serrate *l.* birds.

serrator (sɛr'atɒr) *a.* [*L. serre* saw; *rostris* beak.] With serrate *l.* birds.

serrator (sɛr'atɒr) *a.* [*L. serre* saw; *rostris* beak.] With serrate *l.* birds.

**serrifrons** (sēr'fērōn) [*L. serris* saw *ferre* to carry] Furnished with saw-like organ or part.

**serriform** (sēr'fōrm) *a.* [*L. serris* saw *forma*, shape.] Like a saw.

**serriped** (sēr'pēd) *a.* [*L. serris*, saw *per* foot.] With notched feet.

**serrula** (sēr'ulā) *n.* [*L. serrula* small saw] A comb-like ridge on chelicerae of some Arachnida.

**serrulate** (sēr'ulāt) *a.* [*L. serrula*, small saw] Finely-notched.

**serrulati** *n.* (sēr'ulāshūn) *n.* [*L. serrula*, small saw] Small notch condition of being finely notched.

**Sertoli cells** [*E. Sertoli* Italian histologist]. Enlarged lining epithelium-cells connected with groups of developing spermatocytes in testes; supporting cells.

**seral** (sēr'āl) *n.* [*L. serare* to put in row *dis*] A minor seral succession of minor life forms.

**serum** (sēr'ūm) *n.* [*L. serum*, whey] Watery fluid which separates from blood on coagulation the secretion of serous membrane whey.

**serum albumin, serum gl. bulin**,—two of proteins of serum.

**sesamoid** (sēr'smōid) *a.* [*Gk. sesamum*, sesame *eidos* form.] *Appl.* bone developed within a tendon and near joint, as patella, radial or ulnar sesamoid, fabella. *n.* A sesamoid bone.

**sesamoidal** (sēr'smōidāl) *a.* [*L. sesamum*, sesame *eidos* form.] *Part* sesamoid bone.

**sessile** (sēr'sl) *a.* [*L. sedere* to sit.] Sitting directly on base without support, stalk, pedicel, or peduncle attached or stationary *opp.* free-living or motile.

**seston** (sēs'tōn) *n.* [*Gk. seis* swift *ing*] Microplankton all bodies living and non-living floating or swimming in water *cf.* ekton neuston plankton, tripton.

**seta** (sēr'tā) *n.* [*L. seta*, bristle.] Any bristle-like structure sporophore of liverworts and mosses chaeta of Chactopoda.

**setaceous** (sēr'tāshūs) *a.* [*L. seta*, bristle.] Bristle-like; set with bristles.

**setif m** (sēr'tifōrm) *a.* [*L. seta*, bristle *forma* shape] Bristle-shaped *appl.* teeth when very fine and closely set.

**setigerous** (sēt'ijērūs) *a.* [*L. seta*, bristle *gerere* to bear.] Bristle-bearing setiferous setiparous.

**setigerous sac**,—a sac, in which is lodged a bundle of setae, formed by invagination of epidermis in parapodium of Chactopoda.

**setirostral** (sēr'tirō'strāl) *a.* [*L. seta* bristle *rostrum* beak.] *Appl.* birds with beak bristles.

**setobranchia** (sēr'tōbrāng'kiā) *n.* [*L. seta*, bristle *Gk. brachia*, gills.] A tuft of setae attached to gills of certain decapods coxopoditic setae.

**setose** (sēr's) *a.* [*L. seta*, bristle.] Set with bristles bristly.

**setula** (sēr'ulā) *n.* [*Dis.* from *L. seta*, bristle.] A setula a thread-like or hair-like bristle.

**setuliform** (sēr'ulīfōrm) *a.* [*Dis.* from *L. seta*, bristle *forma*, shape.] Thread-like; like a setula or fine bristle.

**setulose** (sēr'ulōs) *a.* [*Dis.* from *L. seta*, bristle.] Set with small bristles.

**sex** (sēs) *n.* [*L. sexus* sex.] The sum of characteristics structure, functions, by which an animal or plant is classed as male or female.

**sex-chromosome**,—the chromosome whose presence, absence, or particular form may determine sex.

**X Y W chromosome** also monosome, idiochromosome heterochromosome special or odd chromosome, etc.

**sex differentiation**,—differentiation of gametes differentiation of or gametes into kinds with different sexual organs.

**sexdigitat** (sēs'dij'tāt) *a.* [*L. sex* six *digitus* finger] With six fingers or toes.

**sexid** (sēs'skī) *a.* [*L. sex* six *indere* to cleave.] Cleft into six, as calyx.

**sexfol** (sēs'foll) *n.* [*L. sex* six *folium* leaf.] A group of six leaves or leaflets round one axis.

- s x hormones**,—g nail hormones and gonadotropic hormones.
- sex limited inheritance**—inheritance of characters whose factors have effect in one sex only
- sex linked inheritance**,—transmission of characters whose factors are borne by the sex-chromosome.
- sex mosaic**,—an intersex, *q.v.*
- gynandromorph**, *q.v.*
- s x ratio**—number of males per hundred females, *r* per hundred births percentage of males in a population.
- sex reversal**,—sex-transformation, a change-over from one sex to the other natural, pathological or artificially induced.
- sexual** (sēks uəl) *a.* [*L. sexus* sex.] *Perf.* sex *appl.* reproduction etc.
- sexual cell**,—ovum or sperm.
- sexual dimorphism**,—marked differences, in shape, size, structure colour etc. between male and female of the same species.
- shaft** (shift) *n.* [*A.S. sceft* spear shaft.] A rachis distal part of stem of feather stem of hair scapus straight cylindrical part of long bone.
- Sharpey's fibres** (*H. Sharpey* Scottish surgeon). Calcified bundles of white fibres and elastic fibres perforating and holding together perosteal lamellae perforating fibres.
- sh ath** (shēth) *n.* [*A.S. scath* shell or pod.] A protective covering theca investing petiole insect wing-cover
- shell** (shell) *n.* [*A.S. scell* shell.] The hard outer covering of animal or fruit *a.* calcareous, siliceous, bony bony or chitinous covering
- shell gland**, **shell sac**,—organ in whose walls material for forming shell is secreted.
- shift** (shift) *n.* [*A.S. ciftan* to divide.] *Appl.* translocation which the portion between two breaks is transferred to a gap left by a third break in the same chromosome of insertional.
- short-day**—*appl.* plants in which the

- flowering period is hastened by relatively short photoperiod, ordinarily less than 12 hours.
- shoulder girdle**—pectoral girdle typically comprising scapula, coracoid, precoracoid, and clavicle.
- stalic** (st'alk) *a.* [*Gk. stalon* saliva.] *Perf.* saliva.
- staioid** (st'ald) *a.* [*Gk. stalon* saliva *stides* form.] Like saliva.
- siblings** (sib'lingz) *n. pl.* [*A.S. sibb* kin.] Offspring of same parents but not at same birth.
- sticula** (stik ula) *n.* [*L. sticula*, small dagger] A small dagger-shaped body at end of graptolite supposed to be skeleton of primary zooid of colony
- side-chain theory**—Ehrlich's theory of phenomena of immunity is that toxins unite with living protoplasm by possessing the same property as that by which nutritive proteins are normally assimilated.
- siderocyte** (sid'erōsit) *n.* [*Gk. sideros* iron *kytos* hollow] A erythrocyte containing free iron not utilised in haemoglobin formation.
- sid rophil** (sid'erōfil) *a.* [*Gk. sideros* iron *philes* loving] Staining deeply with iron-coating tains tending to absorb iron siderophilous. *n.* An organism which thrives in the presence of iron.
- siero em** (syer oēm) *n.* [*Russ. serys* grey *zemlya*, soil.] Grey soil containing little humus of middle-latitude continental desert regions.
- sie e ar e**,—perforated area of cell-wall of sieve elements, with groups of pores surrounded by callose
- sieve** = *tl*—a phloem cell having perforated areas of cell-wall
- cell of sieve tubes
- sieve disc**,—sieve plate in phloem cells.
- sieve elements**,—the conducting parts of phloem sieve cells and sieve tube cells.
- si vo pit**,—a primary pit giving rise to sieve pores.
- si vo plate**—part of the wall of a sieve cell containing simple or

compound *see* areas the perforated and thickened end of sieve-tube cell area f. conal lobe of pedipalp, with openings of salivary ducts, in spiders.

sieve pore—one of the perforations in sieve area or sieve plate.

sieve tissue, — essential tissue of phloem of vascular bundles.

sieve tubes,—phloem vessels, long slender structures consisting of elongated cells placed end to end, forming lines of conduction.

sight (sh) *n*. [A.S. *sigt* sight.] The visual faculty impressions of outward things conveyed to brain by retina and optic nerves.

sigillate (sij'illät) *a*. [L. *sigillum* seal.] Having seal-like markings, as certain rhizomes and roots.

sigma (sig'mä) *n*. [Gk. *Σ* sigma.] A C-shaped sponge spicule.

sigmaspire (sig'mäspir) *n*. [Gk. *Σ* sigma L. *spira*, coil.] A sigma with an additional twist.

sigmoid (sig'moid) *a*. [Gk. *Σ* sigma *sikos* form.] Curved like sigma curved in two directions *appl.* arteries, cervices, valves.

sigmoid flexure, — an S shaped double curve as in bird's neck S-shaped curve of colon.

silicle (sil'icl) *n*. [L. *silicula* little pod.] A silicula, or short flat form of silique.

silicol (sil'icöl) *n*. [L. *siles* flint *silere* to inhabit.] A plant thriving in markedly siliceous soil of calcifuge.

silicula,—*see* silicle.

silicular (sil'ik'ülär) *a*. [L. *silicula*, little pod.] Siliculose siliculous like, *part* or having silicle.

silique (sil'ikwä) *n*. [L. *silique*, pod.] A long cylindrical fruit divided in two by false septum, characteristic of Cruciferae silique superficial funicles surrounding olive, *g*.

siliquiform (sil'ikwiförm) *a*. [L. *silique*, pod *forma*, shape.] Formed like silique or silique.

siliquose (sil'ikwös) *a*. [L. *silique* pod.] Siliquous bearing siliques.

Silurian (sil'ü rian) *a*. [L. *Silurus*

people of Britain] *Part* or *appl* period of Palaeozoic era, between Ordovician and Devonian.

silvicolous (sil'vik'ölös) *a*. [L. *silvi* *colis* forest inhabitant.] Inhabiting or growing in woodlands *appl* plant formations.

simian (sim'iän) *a*. [L. *simia*, pe.] Possessing characteristics of a *part* anthropoid apes.

simple eyes,—ocelli which occur with or without compound eyes in adults of many insects usually the only eyes possessed by larvae eyes with only one lens.

simplex (sim'plik) *a*. [L. *simplex* simple.] Having one dominant gene in polyploidy.

simulation (sim'üläshün) *n*. [L. *simulare* to simulate.] Assumption of features or structures intended to deceive enemies as forms of leaf and stick insects, and all varieties of protective coloration.

sincliptal (sin'klip'täl) *a*. [L. *semi* half *caput*, head.] *Part* the snout.

sincliptal (sin'klip'täl) *a*. [L. *semi* half *caput*, head.] Upper or fore part of head.

sinistral (sin'isträl) *a*. [L. *sinister* left.] On the left *appl.* a shell whose spiral turns in opposite direction to dextral.

sinistrorse (sin'iströrs) *a*. L. *sinister* left *versus* to turn.] *Appl.* spiral turning towards the left, *opp* dextrorse.

sinuate (sin'it) *a*. [L. *sinus* curve.] Winding tortuous having wavy indented margin, as leaves sinuous.

sinu-auricular (sin'bör'ik'ülär) *a*. [L. *sinus* gulf *auricula*, small ear] *Appl* node, group of cells of the auricle near opening of anterior vena cava and where heart-beat is initiated of pace-maker *appl.* valves between sinus venosus and atrium sinistral.

sinuspalliate (sin'üpäl'it) *a*. [L. *sinus* curve *pallium* mantle.] In mollusca, having well-developed siphon, and so an indented pallial line. *Opp* integripalliate.

**sinus** (sī' ū) *n*. [L. *si* *s* curve  
r gulf] A cavity depression  
recess, or dilatation a groove or  
indentation.

**sinus pocularis**,—uterus masculinus.

**sinus rhomboidalis**,—In vertebrate  
embryos, posterior incompletely-  
closed part of medullary canal  
late a dilatation of canal in sacral  
region formed from it.

**sinus venosus**,—posterior chamber  
of tubular heart of embryo in  
lower vertebrates, corresponding  
structure receiving venous blood  
and opening into auricle; cavity  
of auricle.

**sinuses of Valsalva** [*A M Val-  
salva* Italian anatomist]. Dilata-  
tions of pulmonary artery and of  
aorta opposite pulmonary and  
aortic semilunar valves of heart.

**sinusoid** (sī'nsōid) *n*. [L. *sinus*  
curve Gk. *sidai* form.] A minute  
blood space in organ tissue formed  
from intercrecence of endodermal  
cells and vascular endothelium,  
as in liver blood space with  
irregular lumen connecting arterial  
and venous capillaries.

**siphon** (sī'fōn) *n*. [Gk. *siphōn* reed  
or tube.] A tubular or siphon-like  
structure of various organisms, sub-  
serving various purposes.

**siphonate** (sī'fōnat) *a*. [Gk. *siphōn*  
tube.] Furnished with siphon  
or siphons.

**siphonate** (sī'fōnet) [Gk. *siphōn*  
tube.] The honeydew tube of an  
aphid.

**siphonial** (sī'fōnīāl) *a*. [Gk. *siphōn*  
tube.] Pert. a siphonium.

**siphonium** (sī'fōnīŭm) *n*. [Gk. *siphōn*  
tube.] Membranous tube connect-  
ing air passages of quadrate with air  
space in mandible also siphonaeum.

**siphonogamic** (sī'fōnōgām'ik) *a*. [Gk.  
*siphōn* tube *gamos* marriage.]  
Securing fertilisation by pollen  
tube siphonogamous.

**siphonogamy** (sī'fōnōg'āmī) *n*. [Gk.  
*siphōn* tube *gamos* marriage.]  
Fertilisation by means of a pollen  
tube.

**siphonoglyph** (sī'fōnōglīf) *n*. [Gk.

*siphōn* tube *glyphōn* to engrave.]

One of two longitudinal grooves or  
sulci of gullet of sea-anemones.

**siphonoplax** (sī'fōnōplāk's) *n*. [Gk.  
*siphōn* tube *plax* tablet.] A  
calcareous plate connected with  
siphon of certain molluscs.

**siphonostele** (sī'fōnōstēl'ē) *n*. [Gk.  
*siphōn* tube *stēle* post.] The  
hollow vascular cylinder of a stem  
which may contain pith.

**siphonostelic** (sī'fōnōstēl'ē'ik) *a*. [Gk.  
*siphōn* tube *stēle* post.] Appl.  
hollow cylindrical stems, chiefly of  
ferns.

**siphonostoma** (sī'fōnōstōm'itōs)  
*a*. [Gk. *siphōn* tube *stoma*,  
mouth.] With tubular mouth  
having front margin of shell notched  
for emission of siphon.

**siphonozoid** (sī'fōnōzōid) *n*. [Gk.  
*siphōn* tube *zōon* animal; *zōidai*  
form.] Small modified polyp with-  
out tentacles and serving to propel  
water through canal system of cer-  
tain Alcyonarian colonies.

**siphoninal** (sī'fōr'nāl) *a*. [Gk.  
*siphōn* tube *his* nose.] With  
tubular nostrils.

**siphuncle** (sī'fōngkl) *n*. [L. *siphun-  
culus* small tube.] A siphonot a  
median tube of skin, partly cal-  
careous, connecting up all compart-  
ments of a nautilus shell.

**siphunculate** (sī'fōng'kulāt) *a*. [L.  
*siphunculus* small tube.] If ring  
a siphuncle.

**sitology** (sitōl'ōjī) *n*. [Gk. *sitos*  
food *logos* discourse.] Science  
of food diet, and nutrition.

**sitophore** (sīt'fōr) *n*. [Gk. *sitos*  
food *phorēn* to bear.] Trough  
of hypopharynx between arms of  
uspemorum.

**sitotoxin** (sitōtōk'sīn) *n*. [Gk. *sitos*  
food *toxikon* poison.] Food  
poison.

**sitotropism** (sitōt'rōpīzm) *n*. [Gk.  
*sitos* food *trope* turn.] Tendency  
to turn direction of food reac-  
tion towards stimulating influences  
of food.

**skeletal** (skel'ētāl) *a*. [Gk. *skelētos*  
dried.] Pert. the skeleton.

**skei togemous** (skēi'tōj'ēns) *n.* [Gk. *skētos* hard *gēnēnos* to produce.] Appl. embryonic structures or parts which later become parts of skeleton.

**skeleton** (skēi'tōn) *n.* [Gk. *skēletos* dried hard.] Hard framework, internal or external which supports and protects softer parts of plant or animal bones to their natural arrangement.

**skeletoplasm** (skēi'tōp'lāzm) *n.* [Gk. *skēletos* hard *plasma*, mould.] Formative material destined to form supporting structures.

**skizophyte** (skr'āfīt) *n.* [Gk. *skēlos* shade *phytos* plant.] A plant growing in the shade, as algae under rocks skiarophyte.

**skin** (skīn) *n.* [A.S. *scīnan* skin.] The external covering of an animal plant, fruit, or seed.

**skin-gills**, — transparent contractile outgrowths from skin of Asteroides, with respiratory function.

**skin-rings**, — annular markings on body of worms.

**ski philous** (skēf'ītēs) *n.* [Gk. *skēlos* shade *phileos*, to love.] Shade loving; skiophil, heliophobous.

**skotoplankton** (skōt'op'lāngk'tōn) *n.* [Gk. *skētos* darkness *planktos* wandering.] Plankton living at depths below 500 metres.

**skototaxi** (skōt'ōt'āks) *n.* [Gk. *skētos* darkness *taxis* arrangement.] Positive orientation towards darkness, not negative phototaxis.

**skull** (skul) *n.* [M.L. *skulla* cranium.] Cranium or hard and bony part of head of vertebrate containing brain.

**sliding growth**, — of cells when new part of cell wall slides over walls of cells with which it comes in contact gliding growth. *Opp.* interpositional or intrusive growth.

**slim bodies**, — cytoplasmic bodies elaborating viscid proteid as in sieve-tube cells.

**slime layer** — carbohydrate sheath of certain bacterial cells, capsule when thickened.

**slough** (sluf) *n.* [M.E. *slouch* skin

of snake.] The dead outer skin cast off periodically by snakes.

**smegma** (smēg'mā) *n.* [Gk. *smegma*, unguent.] Secretion of preputial glands, or of clitoris glands sebum preputiale.

**smell** (smell) *n.* [M.E. *smel* odour] Sensation and perception induced by stimulation of the olfactory cells by odoriferous molecules an odour

**soboles** (sōb'ōlēs) *n.* [L. *soboles* offspring.] A sucker or underground creeping stem.

**soboliferous** (sōb'ōl'ērēs) *n.* [L. *soboles* offspring *ferre* to carry] Having shoots or running stems.

**sociation** (sōsh'āshōn) *n.* [L. *sociare* to associate.] A minor unit of vegetation micro-association.

**society** (sōsh'ētē) *n.* [L. *societas* company] A number of organisms forming community community of plants other than dominants within an association or consociation.

**soft-rayed**, — having jointed fin-rays.

**soft-shell d** — *appt.* eggs *appt.* turtles with soft leathery skin.

**solisus**, — *solisus*, *g.s.*

**solar** (sō'lār) *n.* [L. *sol* sun.] Having branches or filaments like rays of sun dextrorse, *g.s.*

**solar plexus**, — a network of sympathetic nerves with some ganglia, situated behind stomach and supplying abdominal viscera coeliac plexus.

**solarisation** (sō'lār'āshōn) *n.* [L. *solaris*, solar] Retardation or inhibition of photosynthesis due to prolonged exposure to intense light.

**solisiform** (sōl'ēf'ōrm) *n.* [L. *solus*, sundial *forma*, shape.] Slipper shaped.

**sol nia** (sōl'ē'nīā) *n. plu.* [Gk. *solon* channel.] Endoderm-lined canals, diverticula from coelentera of zooid colony

**sol nocytes** (sōl'ē'nōshēs) *n. plu.* [Gk. *solon*, channel *kytos* hollow] Slender club-shaped tubular flagellated cells connected with nephridia of some Polychaeta, Trochelmintbes and of Amphioxus.



**solenostele** (sōlēnōstēl'ē) *n.* [Gk. *solen* channel *stēle* column.] A stage after the siphonostele in fern-stem development.

**solena** (sōlē'nā) *n.* [L. *solen*, sol of foot.] A flat calf muscle beneath gastrocnemius.

**soliped** (sōl'ipēd) *a.* [L. *solus* single *pes* foot.] Solid hoofed, as horse.

**solitary glands or follicles.**—lymphoid nodules occurring singly in intestines, and constituting Peyer's patches when aggregated.

**soma** (sō'mā) *n.* [Gk. *sōma*, body] The animal or plant body as a whole with exception of germinal cells.

**somactids** (sōmākt'ids) *n. pl.* [Gk. *sōma*, body *aktis* ray] Endoskeletal supports of dermal fin-rays radials.

**somacule** (sō'mākūl) *n.* [Gk. *sōma* body] A hypothetical unit of

**somæsthesia** (sōmēs'hē'siā) *n.* [Gk. *sōma*, body *sthesia* sensation] Sensation due to stimuli from skin, muscle or internal organs.

**somæsthic** (sō'mēs'hē'tik) *a.* [Gk. *sōma* body *sthesia* sensation.] *Appl* sense of pressure cold warmth, pain hunger vertigo etc.

**somatic** (sōmā'tik) [Gk. *sōma*, body] *Part* purely bodily part of animal or plant *appl* germinal *appl* mutation occurring in body cell.

**somatoblast** (sō mātōblast) [Gk. *sōma* body *blastos* bud] A cell which gives rise to somatic cells specialised micromeres in oosperm division of Annelates.

**somatocyst** (sō mātōsist) *n.* [Gk. *sōma* body *kystis* bladder] A air cavity in pneumatophore of Siphonophores.

**somatode** in (sō mātōdērm) *n.* [Gk. *sōma* body *derma*, skin] The outer cells in Mesozoa.

**somatogamy** (sōm ātōg ām) *n.* [Gk. *sōma* body *gamos* marriage] Pseudogamy pseudomixis.

**somatogenic** (sō mātōjēn'tik) *a.* [Gk. *sōma* body *gennao* to produce]

Developing from somatic cells *somatogenic* *appl* variation or adaptations arising from external stimuli

**somatome** (sō mātōm) *n.* [Gk. *sōma*, body *teme* cutting] A somite or body segment.

**somatophyt** (sō mātōfīt) *n.* [Gk. *sōma*, body *phytos*, plant.] A plant whose cells develop mainly into adult body tissue.

**somatoplasm** (sō'mātōplāzm) *n.* [Gk. *sōma*, body *plasma*, mould.] The substance of a somatic cell.

**somatoplasmic** (sō mātōplōr'āl) *a.* [Gk. *sōma* body *plasma*, side] *Part* the somatopleure.

**somatopleur** (sō mātōplōr) *n.* [Gk. *sōma*, body *plasma* side.] The body-wall formed by somatic layer of mesoblast becoming closely connected with surface epiblast.

**somatotyp** (sō mātōtip) *n.* [Gk. *sōma* body *typos* pattern.] Body type or conformation as rated by measurements.

**somatotropic** (sō mātōtrōp'ik) *a.* [Gk. *sōma*, body *tropikos* turning] Inducing or stimulating growth *appl* a pituitary hormone.

**somit** (sō'mit) *n.* [Gk. *sōma* body] A mesoblastic segment or compartment body segment of an articulate animal.

**soni** (sōn'ik) [L. *sonare* to sound.] *Part* or produced by sound.

**Sonoran** (sōnd rān) *a.* [Sonora Mexican State] *Appl* or *part* zoogeographical region of southern North America including northern Mexico between arctic and neotropical regions Medio-Columbian.

**soral** (sō rāl) [Gk. *soros* heap] *Part* a sorus

**soredial** (sōrē dial) [Gk. *soros* heap] *Part* or resembling a soredium.

**sorediate** (sōrē dīl) [Gk. *soros* heap.] Bearing soredia.

**soridium** (sōrē'dīrēm) *n.* [Gk. *soros* heap] A scale like or globular body consisting of fungal hyphae with some algal cells, on thallus of some lichens and serving for propagation.

sporiferous (sôrif'êrûs) *n.* [Gk. *spora* heap L. *ferre* to carry] Bearing spore.

sorocela (sôrô'stê) *n.* [Gk. *soros* heap.] A composite fruit formed by fusion of fleshy axes and flowers, as pine-apple.

sorption (sôrp'shûn) *n.* [L. *sorbere* to suck in.] Retention of material at surface, by absorption or by adsorption.

sorus (sô'rûs) *n.* [Gk. *soros* heap.] A collection of small stalked sporangia on under surface of fern pinnae group of antheridia on frond of seaweeds clusters of spores in some Sarcodina.

spadiceous (spâd'ish'ûs) *a.* [L. *spadix* palm-branch.] Arranged like a spadix spadiceiform.

spadiciform (spâd'ish'fôr'm) *a.* [L. *spadix* palm branch *forma*, shape.] Resembling a spadix.

spadiceous (spâd'ish'ûs) *a.* [L. *spadix* a palm-branch.] Like spadix.

spadix (spâ'diks) *n.* [L. *spadix* palm-branch with fruit.] A racemose inflorescence with elongated axis, sessile flowers, and an enveloping spathe succulent spike endodermal rudiment of developing membrum of certain Coelentera conoid amalgamation of certain tentacles in Nautilus.

panandry (spânân'drî) *n.* [Gk. *gamos* scarce *aner* male.] A scarcity of males progressive decrease in number of males, as in some insects.

spanogamy (spânôg'âmî) *n.* [Gk. *gamos* scarce; *gamos* marriage.] Progressive decrease in number of females.

spasm (spâzm) *n.* [Gk. *spasmos* tension.] Involuntary muscular contraction spastic or spasmodic contraction of muscle fibres.

spasmodic (spâz'môn'îk) *n.* [Gk. *spasmos* tension *nomos* thread.] [certain infusorians, stalk muscle formed by union of longitudinal myocytes.

pat (spât) *n.* [A.S. *spandian* t split]

The spawn or young of bivalve mollusca.

pathaceous (spâthâ'shûs) *a.* [Gk. *spathe* broad blade.] Resembling or bearing spathe spathal.

spath (spâth) *n.* [Gk. *spathe* broad blade.] A large enveloping leaf green or petaloid, protecting a spadix.

sp thed (spâthd) *a.* [Gk. *spathe* broad blade.] Furnished with spathe.

path lla (spâthel'la) *n.* [Gk. *spathe* broad blade.] Small spathe surrounding division of palm spadix.

pathos (spâthûs) *a.* [Gk. *spathe* broad blade.] With or like spathe, patia zonularia,—canal of Petia, surrounding marginal circumference of lens of eye.

patula (spât'ûlâ) *n.* [L. *spatula*, spoon.] A breast bone or anchor process of certain dipterous larvae.

spatulate (spât'ûlât) *a.* [L. *spatula*, spoon.] Spoon-shaped *appl.*

leaf with broad rounded per thence tapering to base.

pawn (spôn) *n.* [O F *spawner* to shed.] Collection of eggs deposited by bivalve mollusca, fishes, frogs, etc. mycelium of certain fungi. T deposit eggs, as by fishes, etc.

pay (spâ) *v.* [L. *spare* much.] T deprive of ovaries.

peciation (spât'ish'ûn) *n.* [L. *spatula* particular kind.] The evolution of species development of specific quality, species formation.

pacies (spât'ish'ûs) *n.* [L. *spatula* particular kind.] A group of interbreeding individuals not interbreeding with another such group a systematic unit including geographic races and varieties, and included in a genus.

pacific (spât'ifik) *a.* [L. *spatula* particular kind *facere* to make.] Second name in binomial nomenclature, *gen* *appl.* characteristics distinguishing species *fact.* species.

specific dynamical action,—see dynamic.

**specificity** (spēs'ifika'm) *n.* [L. *species* kind *facer* to make.] Condition of being specific being limited to a species restriction of parasites to particular hosts.

**spectrum** (spēk'trūm) *n.* [L. *spec-trum* appearance.] A statistical survey of the distribution of species for determination and comparison of biogeographical regions.

**spelaeology** (spē'lēol'ojī) *n.* [Gk. *spelaeon* cave *logos* discourse.] The study of caves and cave life.

**sperm** (spērm) *n.* [Gk. *sperma* seed.] The male fertilizing element, spermatozoid *g.* spermatozoon *g.* semen, *g.*

**sperm centrosome**, — end-knob of axial filament of spermatozoon, situated on middle piece just at base of head according to others the small body at apex of head.

**sperm nucleus**, — male pronucleus.

**spermatiduct** (spēr'matidukt) [Gk. *sperma*, seed L. *ducere* to lead.] Duct for conveying spermatozoa.

**spermaphore** (spēr'matidōr) *n.* [Gk. *sperma* seed *pherein* to bear.] Placenta of plants.

**spermatophyte** (spēr'matīf) *n.* [Gk. *sperma*, seed *phytis* plant.] Seed plant phanerogram, spermatophyte.

**spermary** (pēr'matī) *n.* [Gk. *sperma* seed.] An organ in which spermatozoa or antheridia are produced spermarium testis.

**spermatangium** (spēr'matān'jūm) *n.* [Gk. *sperma* seed *aggeion* vessel.] Antheridium of certain algae.

**spermatogenesis** (pēr'matēkō'sis) *n.* [Gk. *sperma* seed *genesis* to bring to maturity.] Development of spermatozoon from spermatid spermatozoon *g.*

**spermatheca** (spēr'matē'kā) *n.* [Gk. *sperma* seed *thēke* case.] A receptaculum seminis sac, female or hermaphrodite invertebrates, for storing spermatozoa.

**spermatid** (pēr'matīk) *n.* [Gk. *sperma* seed.] First spermatozoon or testis.

**spermatid** (spēr'matīd) *n.* [Gk. *sperma* seed.] A haploic cell arising by division of secondary spermatocyte and becoming a spermatozoon.

**spermatiferous** (spēr'matīf'ērōs) *a.* [Gk. *sperma*, seed L. *ferre* to carry.] Bearing spermatia.

**spermatophore** (spēr'matōphōr) *n.* [Gk. *sperma*, seed; *pherein* to bear.] A spermatia producing sporophore.

**spermatise** (spēr'matīs) *v.* [Gk. *sperma*, seed.] To impregnate.

**spermatium** (spēr'matīshūm) *n.* [Gk. *sperma*, seed.] A non-motile sperm of red algae a small cell or conidium formed by abstriction of sporogonia of wheat rust.

**spermatoblast** (spēr'matōblast) *n.* [Gk. *sperma*, seed *blastis* bud.] A spermatid a Sertoli cell, *g.*

**spermatoblastic** (spēr'matōblastīk) *a.* [Gk. *sperma*, seed *blastis* bud.] Sperm-producing.

**spermatocyst** (spēr'matōkēst) *n.* [Gk. *sperma* seed *kystis* bladder.] A seminal sac.

**spermatocyte** (spēr'matōkēt) *n.* [Gk. *sperma* seed *kytis* hollow.] A cell arising by growth from a spermatogonium primary spermatocyte divides to form two secondary spermatocytes, each of which gives rise to two spermatids.

**spermatocytogenesis** (spēr'matōkēt'ojēn'ēsis) *n.* [Gk. *sperma* seed; *kytis* hollow *genesis* descent.] First phase of spermatogenesis, preceding spermiogenesis.

**spermatogenesis** (spēr'matōjēn'ēsis) *n.* [Gk. *sperma*, seed *genesis* origin.] Sperm-formation, from spermatogonium through primary and secondary spermatocytes, and spermatid to spermatozoon.

**spermatogenetic** (spēr'matōjēnētīk) *n.* [Gk. *sperma* seed *genesis* descent.] First sperm-formation sperm-producing spermatogenic, spermatogenous.

**spermatogonial** (pēr'matōgō'nāl) *n.* [Gk. *sperma* seed *gonos* offspring.] First a spermatogonium.

spermatogonium (spér'mátogó'níum) *n.* [Gk. *sperma*, seed *gonos* offspring] Primordial male germ-cell sperm mother-cell.

permatoid (spér'mátoid) *a.* [Gk. *sperma*, seed *oides* form.] Like a sperm.

spermatomeritea (spér'mátóm'érítea) *n. pl.* [Gk. *sperma* seed *meros* part.] Chromatin granules formed from sperm-nucleus.

permatophore (spér'mátófor) *n.* [Gk. *sperma* seed *phoros* to bear.] A capsule of albuminous matter containing a number of sperms.

permatophyte (spér'mátófit) *n.* [Gk. *sperma*, seed *phyton* plant.] A seed-plant: phanerogam, spermatophyte.

spermatoplasma (spér'mátóplásm) *n.* [Gk. *sperma*, seed *plasma*, mould.] Protoplasm of sperm cells.

spermatoplast (spér'mátóplást) *n.* [Gk. *sperma*, seed *plasto* moulded.] A male sexual cell.

spermatosome (spér'mátósóm) *n.* [Gk. *sperma* seed *soma*, body.] A spermatozoon.

spermatotoxin (spér'mátótóksín) *n.* [Gk. *sperma*, seed *toxikon* poison.] Antibodies causing sterility formed after injection of spermatozoa in serum.

spermatosyngma (spér'mátósígmá) *n.* [Gk. *sperma* seed *syngma*, union.] Union by conjugation of two or more spermatozoa, as in vas deferens of some insects.

spermatozoa — *pl.* of spermatozoon, *g.s.*

permatozoid (spér'mátózóid) *n.* [Gk. *sperma*, seed *zoo*, animal *zōon*, div.] An antherozoid free swimming male gamete spermatozoid.

permatozoon (spér'mátózóon) *n.* [Gk. *sperma*, seed *zoo* animal.] A male reproductive cell, consisting usually of head, middle piece, and locomotory flagellum.

spermiducal (spér'mídú'ká) *n.* [Gk. *sperma* seed *L. ducere* to lead.] *Appl.* glands into or near which

sperm-ducts open in many vertebrates; *appl.* glands associated with male ducts, or prostates in Oligochaeta.

spermiduct, — spermiduct, *g.s.*

permin (spér'mín) *n.* [Gk. *sperma* seed.] The hormone of testis.

spermine (spér'mén) *n.* [Gk. *sperma*, seed.] A substance whose phosphate occurs in semen, also found in pancreas and yeast  $C_{15}H_{33}N$ .

permiolacryptotheca (spér'mió'kállp'trót'hé'ká) *n.* [Gk. *sperma*, seed *haptos*, covering; *theka* case.] The head-cap of a spermatozoon.

permiogenesis (spér'miójén'ésis) *n.* [Gk. *sperma*, seed *genesis* origin.] Development of spermatozoon from spermatid spermiotekesis spermatogenesis, *g.s.*

spermism (spér'mízm) *n.* [Gk. *sperma*, seed.] Theory held by spermists or animaculists that embryo is derived from spermatozoon alone.

spermium (spér'míum) *n.* [Gk. *sperma*, seed.] Spermatozoon.

sperm blast (spér'móblást) *n.* [Gk. *sperma*, seed *blastos* bud.] A spermatid spermatoblast.

spermocarp (spér'mókárp) *n.* [Gk. *sperma*, seed *karpos* fruit.] An oogonium after fertilisation.

spermocentre (spér'mósn'tár) *n.* [Gk. *sperma*, seed *L. centrum*, centre.] The male centrosome during fertilisation.

spermiderm (spér'móidárm) *n.* [Gk. *sperma*, seed *derma*, skin.] The seed coat, consisting of inner tegmen and outer testa episperm.

spermoduct, — spermiduct, *g.s.*

spermogoneis, — spermatogoneis, *g.s.*

spermogoniferous (spér'mógóníf'érús) *n.* [Gk. *sperma* seed *gonos* offspring *L. ferre* to carry.] Having spermogonia.

spermogoni m (spér'mógó'níúm) *n.* [Gk. *sperma*, seed *gonos* generation.] A capsule containing spermatia, in certain fungi and lichens.

spermogonous (spér'móg'onús) *n* [Gk. *spérma* seed *gonos* off spring] Like or *part* a spermogonium.

spermology (spér'mól'ójí) *n* [Gk. *spérma* seed *logos* discourse.] The study of seeds.

spermatophyte —spermatophyte

spermotheca (spér'móth'ēkă) *n* [Gk. *spérma*, seed *thekē* case.] A chamber for storing sperms received in copulation. *spermatheca* *q.v.*

spermatype (spér'mót'ip) *n* [Gk. *spérma* seed *typos* pattern.] A plant specimen grown from seed of a type plant.

perma sangma (spér'máz'g'mă) *n* [Gk. *spérma* seed *sangma*, bond.] A mass of regularly aggregated spermatozoa, for delivery into spermatheca.

sphacelate (sfăs'elăt) *a*. [Gk. *sphakēlos* gangrene.] Decayed withered mortified.

sphacella (sfăs'ēlă) *n* [Gk. *sphakēlos* gangrene.] Conical honey dew stage in development of fungus, producing sclerotium or ergot.

sphae —also spher

sphaeraphides (sfērăf'idēs) *n* *plu* [Gk. *sphaire* globe *raphis* needle.] Conglomerat raphides globular lumens of minute crystals in plant cells. *cluster crystals*

sphaerenchyma (sfērēng'kimă) *n* [Gk. *sphaire* globe *enchyma* juice.] Tissue of spherical cells.

sphaeridia (sfēr'id'ia) *n* *plu* [Gk. *sphaire* globe *diamētron* diam.] Small rounded bodies probably balancing organs, found on echinoderms.

sphaeroid (sfēr'oid) *a* [Gk. *sphaire* globe *eidos* form.] Globula ellipsoidal or cylindrical *appl* an aggregate of individual protozoa.

sphaeroplast (sfēr'róplăst) *n* [Gk. *sphaire* globe *plastos* formed.] A bioblast a hypothetical unit *q.v.* spheroplast.

sphagnicolous (sfăgnik'ôlôs) *n* [Gk. *sphagnum* moss *ikos* cedar to inhabit.] Inhabiting peat mosses.

sphagnous (sfăg'ô) *a*. [Gk. *sphagnum* moss.] *Part* peat moss.

sph nethmoid (sfēnēth'moid) *n* [Gk. *sphaire* wedge *rhinos* sieve *eidos* form.] Single bone replacing orbitosphenoids in Anura girdle bone.

spheno-ethmoidal (sfē'nōēth'moid'ăl) *a*. [Gk. *sphaire* wedge *rhinos* sieve *eidos* form.] *Part* or in region of sphenoid and ethmoid *appl* a recess above superior nasal concha, and a suture.

sphenofrontal (sfē'nōfrōn'tăl) *a*. [Gk. *sphaire* wedge *L. frons* forehead.] *Part* sphenoid and frontal bones *appl* a suture.

sph noid (sfē'noid) *n* [Gk. *sphaire*, wedge *eidos* form.] A basal compound skull bone of some vertebrates butterfly bone.

sphenoidal (sfē'noid'ăl) *a*. [Gk. *sphaire* wedge *eidos* form.] Wedge-shaped *part* or in region of sphenoid *appl* fissure processes, nostrum, sinus.

sphenolateral (sfē'n'ôlăt'ērăl) *n*. [Gk. *sphaire* wedge *L. latus* side.] One of dorsal pair of cartilages parallel to trabeculae pleuro-sphenoid.

sphen mandibular (sfē'nōmăndib'ilar) *n* [Gk. *sphaire* wedge *L. mandibulum* jaw] *Part* sphenoid and mandible *appl* ligament.

sph omalillary (sfē'nōmăl'ilar'î) *a*. [Gk. *sphaire* wedge *maxilla* jaw] *Part* sphenoid and maxilla *appl* fissure and (pterygopalatine) foramen.

ph nopalatine (sfē'nôpăl'atîn) *a*. [Gk. *sphaire* wedge *L. palatus* palate] *Part* sphenoid and palatine *appl* artery foramen, ganglion nerves.

sphenoparietal (sfē'nôpăr'tăl) *a* [Gk. *sphaire* wedge *L. paries* wall.] *Part* sphenoid and parietal *appl* a cranial suture.

sphenopterygoid (sfē'nōēr'goid, pēr) *a*. [Gk. *sphaire* wedge *pteryx* wing *eidos* form.] *Part* sphenoid and pterygoid *appl* mucous pharyngeal glands near openings of Eustachia tubes, in birds.

**sphenosquamosal** (sfē'nōskwāmōs al) *a.* [Gk. *sphēn* wedge; *L. squama*, scale.] *Appl.* cranial suture between sphenoid and squamosal.

**sphenotic** (sfē'nōtīk) *n.* [Gk. *sphēn* wedge *ous* ear.] Post frontal cranial bone of many fishes.

**sphenoturbinial** (sfē'nōtūr'bīnāl) *n.* [Gk. *sphēn* wedge *L. turba* whirl.] Laminar process of sphenoid.

**sphenozygomatic** (sfē'nōf'gōmētīk) *a.* [Gk. *sphēn* wedge *zygoma*, *zygon* cross-bar] *Appl.* cranial suture between sphenoid and zygomatic.

**spher** —*also* **sphaer**

**sphaeraster** (sfēr'āstēr) *n.* [Gk. *sphaira*, globe; *aster* star] A many-rayed globular spicule.

**sphaerocrystals**, —**sphaeraphides**.

**sphaeroidal** (sfērō'idāl) *a.* [Gk. *sphaira*, globe *eides* form.] Globular but not perfectly spherical.

**sph. glandular epithelium**.

**spherome** (sfēr'ōm) *n.* [Gk. *sphaeroma* made globular.] Cell inclusions producing oil or fat globules intracellular fatty globules as whole.

**spheromere** (sfēr'ōmēr) *n.* [Gk. *sphaira*, globe *meros* part.] A segment of radiate animal.

**spheroplasts** (sfēr'ōplāst) *n.* *plu.* [Gk. *sphaira*, globe *plastos* formed.] Chondriocome bioblasts; bodies found among granulations of protoplasm.

**spherula** (sfēr'ūlā) [*L. sphaerula*, small globe.] A spherule or small sphere small spherical spicule.

**spherulate** (sfēr'ūlāt) *a.* [*L. sphaerula*, small globe] Covered with small spheres.

**sphinct** (sfīng'ktēr) *n.* [Gk. *sphingō* to bind tight.] A muscle which contracts or closes an orifice, as that of bladder mouth anus vagina, etc.

**sphragidal** (sfēr'jīdāl) *a.* [Gk. *sphragis* seal.] *Appl.* plastic fluid secreted by tubular glands opening

into vesicula seminales in male Lepidoptera and forming a sphragis.

**sphragis** (sfēr'jīs) *n.* [Gk. *sphragis* seal.] A structure sealing bursa copulatrix on female abdomen of certain Lepidoptera after pairing and consisting of hardened sphragidal fluid.

**sphygmie** (sfīg'mīk) *a.* [Gk. *sphygma* pulse.] *Part.* pulse *appl.* second phase of systole.

**Spigelian** (spig'ēlān) *n.* [*A. van den Spiegel* or *Spigelius* Flemish anatomist]. *Appl* a small lobe of liver, originally named lobus exiguus in mammals *appl* caudate lobe.

**spigots** (spig'ōts) *n. pl.* [*L. spica*, spike.] Conical spinning tubes, in spiders.

**spike** (spīk) *n.* [*L. spica* spike ear of corn.] Inflorescence with sessile flowers along axis.

**spikelet** (pīk'lēt) *n.* [*L. spica* spike.] A secondary spike of grasses, bearing few flowers locusta.

**spina** (spī'nā) *n.* [*L. spina*, spine.] A spine median apodema behind furca, as in many Orthoptera.

**spinal** (spī'nāl) *n.* [*L. spina* spine] Pert. backbone, or spinal cord *appl* foramen ganglion nerves etc.

**spinal canal**—vertebral canal containing spinal cord.

**spinal cord**—nervous tissue contained in spinal or vertebral canal medulla spinalis.

**spinalis** (spī'nāl's) *n.* [*L. spina*, spine] Name given to muscles connecting vertebrae.

**spinate** (spī'nāt) *n.* [*L. spina* thorn.] Spine shaped spine bearing spiniferous, spinigerous.

**spination** (spī'nāshn) *n.* [*L. spina* thorn.] The occurrence development, or arrangement of spines.

**spindle** (pīn dē) *n.* [*A.S. spinnan*, to spin] A structure resembling a spinning machine spindle an elongated ped. cell bearing sessile flowers struct. formed of achromatin fibres during mitosis *n. muscle-spindle f. n.*

**spindle fibre locus**—centrosome *f. n.*

**spine** (pīn) *n.* [*L. spina* spine.] A sharp-pointed process on leaves bones echinoids porcupines the backbone vertebral column pointed process of vertebra scapular ridge fin-ray.

**spinescent** (spīnēs ēnt) *n.* [*L. spinere* to become piny] Tapering tending to become spiny.

**spiniferous** (pīnīf'ērū) *n.* [*L. spina* pine *ferre* to carry] Spine

bearing; *appl* pads on ventral side of distal end of leg in Peripatus, spicate spinigerous.

**spiniform** (spī'nīfōrm) *n.* [*L. spina* spine *forme* shape.] Spine-shaped.

**spinisternite** (spī'nīstērnh) *n.* [*L. spina* spine *sternum* breast bone] A small sternite with spiniform apodema, between thoracic segments of insects.

**spinnaret** (spīn'ērēt) *n.* [*A.S. spinnen* to spin.] One of organs perforated by tubes connected with glands secreting liquid silk, in spiders one of organs preparing material for puparia, as in Coccidae.

**spinorale** (spīn'ērāl) *n.* [*A.S. spinnen* to spin.] A tube discharging silk secretion of spiders.

**spinning glands**—glands which secrete material for webs in spiders, and for cocoons in caterpillars.

**spino-occipital** (spī'nōōkīp'ītāl) *n.* [*L. spina* spine *occiput* back of head.] *Appl* nerves arising in trunk somites which later form part of the skull.

**spinose** (spī'nōs) *n.* [*L. spina* spine.] Bearing many spines.

**spinous** (spī'nōs) *n.* [*L. spina* spine.] Spiny spine-like *appl* place of body.

**spinous process**—median dorsal spinelike process of vertebra *n.* process of sphenoid process between articular surfaces of proximal end of tibia.

**spinulat** (spīn'ūlāt) *n.* [*L. spinula*, small pine] Covered with small spines.

**spinulation** (spīn'ūlāshn) *n.* [*L. spinula* small spine.] A defensive spiny covering stat. of being spinulate.

**spinule** (spīn'ūl) *n.* [*L. spinula* small spine] A small spine.

**spinulose** (spīn'ūlōs ēnt) *n.* [*L. spinula* small spine] Tending to be piny.

**spinuliferous** (spīn'ūlīf'ērōs) *n.* [*L. spinula* small pine *ferre* to bear] Bearing small pines pinulose, spinulose.

spiny-finned, — bearing fins with spiny rays for support.

spiny-rayed, — *appl.* fins supported by spiny rays.

spiracle (spī'rāk'l) *n.* [L. *spiraculum*, air-hole.] First pharyngeal aperture or visceral cleft. Branchial passage between mandibular and hyoid arches in fishes. Lateral branchial opening in tadpoles. Nostril aperture of *Cotaceae*. Respiratory aperture behind eye of skates and rays. Breathing aperture of insects. Perture of book lungs. Any of five openings round mouth of *Blastoides*. *spiraculum*.

spiracular (spī'rāk'ulār) *a.* [L. *spiraculum* air-hole.] *Pert.* a spiracle.

spiraculate (spī'rāk'ulāt) *a.* [L. *spiraculum* air-hole.] Having spiracles; spiraculiferous.

spiraculiform (spī'rāk'ulifōrm) *a.* [L. *spiraculum* air-hole *forma*, shape.] Spiracle-shaped.

spiracul *m.* — spiracle, *g.s.*

spiral (spī'rāl) *a.* [L. *spira*, coil.] Winding, like screw. *appl.* leaves alternately placed. *appl.* flower with spirally inserted parts. *appl.* thickening of cell-wall; *appl.* chromatids and chromosomes. A coiled structure. Coil of the chromosome thread in mitosis and meiosis. *cf.* internal, relational relic spiral.

spiral cleavage, — cleavage with unequal parts, arranged in mosaic fashion and interlocking. Upper cells rotating to right to alternate with lower. Oblique or alternating cleavage.

spiral valve, — in fishes, except teleosts, spiral infolding of intestine wall.

spiral vessels, — first xylem elements of stem, spiral fibres coiled up inside tubes and so adapted for rapid elongation.

spiralis (spī'rāl'is) *n. pl.* [L. *spira* coil.] Coiled structures supported by crura, in certain brachiopoda.

spiranth (spī'rānth) *n.* [Gk. *spira* coil *anther* flower.] Displace-

ment of flower parts through twisting.

spiraster (spī'rā'stēr) *n.* [L. *spira*, coil *aster* star.] A spiral and rayed sponge spicule.

spire (spīr) *n.* [L. *spira* coil.] Totality of whorls of a spiral shell.

spirose (spī'rōs) *n.* [Gk. *spira* coil.] Thread-like appearance of nuclear chromatin during prophase of mitosis.

spiracles (spī'rāk'lis) *n. pl.* [L. *spira*, coil.] Thin, coiled, thread-like outgrowths of some seed-coats.

spiriferous (spī'rīfērōs) *a.* [L. *spira*, coil *fero* to bear.] Having spiral structure.

spirillar (spī'rīlār) *a.* [L. *spirillum* small coil.] *Pert.* or resembling spirillum.

spirillum (spī'rīl'um) *n.* [L. *spirillum* small coil.] A thread-like curved bacterium. Motile filament in cryptogam antheridium.

spirivalve (spī'rīvalv) *n.* [L. *spira*, coil *valvus* folding door.] A gastropod with spiral shell.

spiroid (spī'rōid) *a.* [Gk. *spira* coil *eidos* form.] Spirally formed.

spirose *m.* (spī'rōsēm) *n.* [Gk. *spira*, coil *seme*, thread.] Coiling thread in infusorian stalk.

spirulat (spī'rūlāt) *a.* [L. *spira* coil.] *Appl.* any spiral structure or coiled arrangement.

spasmodic (spā'smōd'ik) *a.* [Gk. *spasmos* entreat.] *Pert.* viscera. *appl.* nerves.

spianchnocoel (spī'ānk'nōsēl) *n.* [Gk. *spianchnos*, entrail *koilos* hollow.] The cavity of lateral plates of embryo persisting as visceral cavity of adult.

spianchnocranium, — viaccrocranium, *g.s.*

planchnology (spī'ānk'nōl'ōj) *n.* [Gk. *spianchnos* entrail *logos* discourse.] The branch of anatomy dealing with viscera.

planchnopleure (spī'ānk'nōplōor) *n.* [Gk. *spianchnos* entrail *pleura*, side.] Inner layer of mesoblast, applied to viscera.



- spleen** (splēn) *n* [Gk. *spēn* spleen.] A vascular organ in which lymphocytes are produced and red blood corpuscles destroyed in vertebrates. *lien*.
- splenic** (splēn'ik) *a*. [Gk. *splēn* spleen.] *Part* the spleen.
- splénial** (plē'nāl) *a* [L. *splēnium* patch] *Part* splenius muscle & splénial bone.
- splénial bon** —membrane bone in lower jaw of some vertebrates.
- spléne** (splēn'ik) *a* [Gk. *splēn* spleen.] *Part* the spleen.
- splénium** (plē'nium) *n* [L. *splēnium* patch.] Posterior border of corpus callosum.
- splénium** (splē'nium) *n* [L. *splēnium* patch] Muscle of upper dorsal region and back & neck.
- splénocyte** (plē'nōst) *n* [Gk. *splēn* spleen *kytē* hollow] A large monocyte believed to originate in spleen endothelial leucocyte & a large mononuclear leucocyte.
- splénophrenic** (plē'nōfrēn'ik) *a* [Gk. *splēn* spleen *phrēn* diaphragm] *Part* spleen and diaphragm.
- spondyl** (spōndil) *n* [Gk. *spondyl* vertebra] A vertebra spondyle.
- spondylous** (spōndil'ūs) *a* [Gk. *spondylus* vertebra] Vertebral.
- spondylus** (pōndil'ūs) *n* [Gk. *spondylus* vertebra] A spondyl vertebra.
- spong colonus** (pōnjf'olūs) *a*. [L. *spongia* sponge *coler* to inhabit] Living a pongs.
- spongin** (spōnj'in) *n* [L. *spongia* sponge] Material of skeletal fibres of sponge.
- spongioblast** (pōnj'oblās) *n* [L. *spongia* sponge (k. *blastus* bud.)] A spongin producing cell.
- spongioblasts** (pōnj'oblās) *n* *plu* [Gk. *spongia* sponge *blastus* bud.] Embryonic epithelial cells which give rise to neuroglia cells and fibres radiating to periphery of spinal cord.
- spongiocyt** (pōnj'iolst) *n* [Gk. *spongia* sponge *kytē* hollow] A vacuolated cell of a fasciculate.

- spongioplasma** (spōnj'iolplāzm) *n* [Gk. *spongia* sponge *plasma* mould.] Cytoplasmic threadwork of a cell cytotritulum rutocon.
- spongiouse** (spōnj'ioūs) *a*. [L. *spongia* sponge.] Of a spongy texture.
- spongoid** full of small cavities.
- spongioblast** —sponginblast, *q.v*
- spongophore** (spōnj'gōfōr) *n* [Gk. *spongia* sponge *phōrēn* to bear] The upper chamber bearing part of a sponge of hypophore.
- spongophyll** (spōnj'gōfil) *n* [Gk. *spongia* sponge *phyllon* leaf.] A leaf having pongs parenchyma, without palisade tissue, between upper and lower epidermis as in certain aquatics.
- spongy** (spōnj) *a* [L. *spongia* sponge] Of open texture lacunar *appt* parenchyma (mesophyll *appt* these surrounding embryo sac as in gymnosperms).
- spontaneous** gene ation, —abiogenesis, *q.v*
- spoon** —small sclerite at base of balancers in Diptera. pinion or tegula.
- sporabola** (pōrāb'olās) *n* [Gk. *spora* seed *boleō* to throw] The trajectory of a spore discharged from sterigma.
- sporadic** (spōrād'ik) *a* [Gk. *sporadikos* scattered.] *Appt* plants confined to limited localities.
- sporadin** (pōrād'in) *n*. [Gk. *sporaden* scattered about.] Trophosome of gregarines moving about in lumen of gut.
- porang** (pōrānj) *n* [Gk. *spora* seed *anggen* vessel.] A porangium *q.v*
- porangia** —*plu* of porangium.
- porangial** (spōrānj'ial) *a*. [Gk. *spora* seed *anggen* vessel.] *Part* a porangium.
- porangiferous** (spōrānj'ifērōs) *n* [Gk. *spora* seed *anggen* vessel; L. *ferre* to bear] Sporangia-bearing.
- porangiform** (pōrānj'ifōrm) *a* [Gk. *spora* seed *anggen* vessel; L. *forma* shape.] Sporangiod like porangium.

**sporangiocarp** (spórán'jókárp) *n.* [Gk. *sporos* seed *ovggon* vessel *karpas* fruit.] An enclosed collection of sporangia a structure of asci and sterile hyphae surrounded by a peridium an ascocarp.

**sporangiolum** (spórán'jókium) *n.* [Gk. *sporos* seed *ovggon* vessel.] A secondary or small few-spored sporangium sporangiole.

**sporangiophor** (spórán'jófór) *n.* [Gk. *sporos* seed *ovggon* vessel *phoros* to bear.] A stalk-like structure bearing sporangia.

**sporangiospore** (spórán'jókáspór) *n.* [Gk. *sporos* seed *ovggon* vessel *sporos*.] A sporangium spore.

**sporangium** (spórán'jókium) *n.* [Gk. *sporos* seed *ovggon* vessel.] A spore-case capsule, or cell in which spores are produced.

**spore** (spór) *n.* [Gk. *sporos* seed.] A highly specialised reproductive cell of plants resistant dormant form of certain bacteria falciform cell of Sporozoa.

**spore formation**, — reproduction by encystation followed by division and free-cell liberation endogenous multiplication sporogony sporogonidia, sporulation.

**spore mother-cells**, — sixteen cells produced by repeated division of an archesporium, each in turn dividing into four spores sporoblasts.

**sporetis** (spór'etis, -shis) *n.* *plur.* [Gk. *sporos* seed.] Idiochromidia chromidia of generative chromatin.

**sporiferous** (spóríf'érus) *n.* [Gk. *sporos* seed *L. ferre* to bear.] Sporidia-bearing.

**sporidial** (spór'idíál) *n.* [Gk. *sporos* seed.] A protobasidium sporidium arising from promycallium, in rusts; sporidlohom.

**sporidium** (spór'idíum) *n.* [Gk. *sporos* seed *idion* div.] Conidium developed by abstraction from conidiophore in fungi ascospore basidio-spore.

**sporidochium** (spór'idók'ium) *n.* [Gk. *sporos* seed *docheion* holder.] Receptacle of certain fungi of sporodochium.

**sporiferous** (spóríf'érus) *n.* [Gk. *sporos* seed *L. ferre* to bear.] Spore-bearing.

**sporification** (spór'ífikáshún) *n.* [Gk. *sporos* seed; *L. facere* to make.] Formation of spores.

**sporiparity** (spór'ipár'it) *n.* [Gk. *sporos* seed *L. parere* to beget.] Reproduction by spore formation.

**sporiparous** (spór'ipár'ús) *n.* [Gk. *sporos* seed *L. parere* to beget.] Reproducing by spore formation.

**sporoblast** (spór'óbblast) *n.* [Gk. *sporos* seed *blastos* bud.] An archesporium stage in spore formation, sporoblast giving rise to spores and these to sporozoites.

**sporocarp** (spór'ókárp) *n.* [Gk. *sporos* seed *karpas* fruit.] An ascocarp structure formed from archicarp and investing hyphae, enclosing spored asci sorus covered by indusium.

**sporocladium** (spór'ókliáds úm, -klí dím) *n.* [Gk. *sporos* seed *kladon* small young branch.] Branch of conidiophore, bearing sporangia or conidia.

**sporocyst** (spór'ókíst) *n.* [Gk. *sporos* seed *kystis* bladder.] A stage in spore formation preceding liberation of spores, or protective envelope of spore in protozoa encysted embryo stage of trematode after degeneration following entry into intermediate host.

**sporocystid** (spór'ókíst'id) [Gk. *sporos* seed *kystis* bladder *oides* form.] Appl. oocyst of Sporozoa when the zygote forms sporocysts.

**sporocyte** (spór'ókíst) *n.* [Gk. *sporos* seed *kystis* hollow.] A spore mother-cell.

**sporodochium** (spór'ókók'ium) *n.* [Gk. *sporos* seed *docheion* holder.] A hemispherical aggregate of conidiophores, cf. sporidochium.

**sporoduct** (spór'ókók't) *n.* [Gk. *sporos* seed *L. ducere* to lead.] A special apparatus for dissemination of spores of Sporozoa and of some Fungi.

porogenesis.—spore formation, *g.p.*  
 sporogenous (spôrj'ôûs) *n.* [Gk. *sporas* seed *gennan* to produce] Spore-producing sporiparous.  
 sporogonial (spôrôj'ôûn) *n.* [Gk. *sporas* seed *gonos* offspring] *Peri* a porogonium.  
 sporogonium (spôrôj'ôûn) *n.* [Gk. *spôr* seed *gonos* offspring] A structure developed from a fertilised oosphere of an archegonium, giving rise to asexual spores, in mosses.  
 sporogony (spôrôj'ôûn) *n.* [Gk. *sporas* seed *gonos* birth.] Spore formation sporogenesis.  
 sporoid (spôr'ôid) *n.* [Gk. *spôr* seed *hîdes* like.] Lik a pore.  
 sporoklita (spôr'ôklitâ) *n.* [Gk. *sporas* seed *klinô* to move.] A motile pore from the oocyst of certain Haemosporidia.  
 sporot (spôr'ot) *n.* [Gk. *spôr* seed *on* being] Gametocyte stage in life-history of Sporozoa.  
 sporophore (spôr'ôfôr) *n.* [Gk. *spôr* seed *phoros* to bear] A pore bearing structure in fungi an inflorescence process of plasmodium producing spores on free surface in Mycetozoa.  
 sporophyidium (spôr'ôfid'ium) *n.* [Gk. *sporas* seed *physis* shoot *idion* *n.* alone] The porangium of certain thallophytes.  
 sporophyll (spôr'ôfil) *n.* [Gk. *spôr* seed *phylon* leaf] A sporangium bearing leaf.  
 sporophyte (spôr'ôfit) *n.* [Gk. *spôr* seed *phylon* plant] A stem covered with porophylls leaves each bearing a porangium in ferns the diploid pore-producing phase in alternation of plant generations *Opp* gametophyte.  
 sporoplasma (spôr'ôplâs) *n.* [Gk. *spôr* seed *plasma* mould.] Sporozoote binucleate amoebula or central part of pore.  
 sporosac (spôr'ôsâk) *n.* [Gk. *spôr* seed *L. sacra* sack] An ovoid pouch-like body consisting of a gonad, a degraded reproductive cell of a medusoid colony.  
 sporotamium *p.* *amfium*

[Gk. *sporas* seed *tamion* store.] Cell layer beneath apothecium, as in lichens.  
 sporozoite (spôrôz'ôit) *n.* [Gk. *spôr* seed *zôon* animal *eidos* form.] A motile spore zoospore.  
 sporozoite (spôrôz'ôit) *n.* [Gk. *spôr* seed *zôon* animal] Spore liberated through dissolving of membrane of sporocyst a phase in life-history of Sporozoa.  
 sport.—a mutation *g.p.*  
 sporulation (spôr'ulâshûn) *n.* [L. *spore* small seed.] Brood formation by multiple cell-division spore-formation liberation of spores.  
 spot fruit.—*sorus*, as of ferns.  
 spur (spôr) *n.* [A.S. *sporn* po] A calcar cog tooth of mallets rim of sclera outside urinal angle cuticula outgrowth on legs of certain insects a process of petal or of a sepal functioning as nectar receptacle small reproductive boot brachyplast *g.p.*  
 spuriae (spôr'îe) *n.* *plu* [L. *spurius* false] Feathers falula or bastard wing.  
 spurius (spôr'îus) *n.* [L. *spurius* false] Seemingly true but morphologically false *appl* dissimulant fruit teeth vein ling.  
 squama (skwâ'mâ) *n.* [L. *squama*, scale] A squame or scale a part arranged like a scale vertical part of frontal bone part of occipital bone above and behind foramen magnum anterior and upper part of temporal bone azenregula or alypuron, a scal below wing base of Diptera a scale-like body attached to second podomere of antenna of some Crustacea.  
 squamate (skwâ'mât) [L. *squama* scal] Scaly.  
 squamation (skwâ'mâshûn) *n.* [L. *squama* scale] Scal arrangement.  
 squame—*squ* *ma* *g.p.*  
 squamella (skwâ'mêlâ) *n.* [Dim. of L. *squama* scale] A small scale or bract palea.  
 squamellat (skwâ'mêlât) *n.* [L. *squama* scale] Having small scales or bract squamelliferous.

**squamelliform** (skwámél'fórm) *a.* [*L. squama*, scale *forma* shape.] Resembling a squamella.

**squamiferous** (skwámif'érús) *a.* [*L. squama*, scale *ferre* to bear] Bearing scales squamigerous.

**squamiform** (skwámif'órm) [*L. squama*, scale *forma* shape.] Scale-like.

**squamosal** (skwámó'sál) *n.* [*L. squama*, scale.] A membrane bone of vertebrate skull forming part of posterior side wall.

**squamosae** (skwám'óse) *a.* [*L. squama* scale.] Covered with scales squamous.

**squamous** (skwám'ós) *a.* [*L. squama* scale.] *App.* simple epithelium of flat nucleated cells, scaly or pavement epithelium.

**squamula** (skwám'úla) *n.* [*L. squama*, scale.] A squamule or small scale minute membranous scale, or lodicule, in grasses tegula of some insects on of small circular areas into which pouch scales of Gymnophiona are divided.

**squamulate** (skwám'úlat) *a.* [*L. squama*, scale.] Having minute scales squamulose.

**squarrose** (skwór'óse) *a.* [*L.L. squarrosus* scurfy] Rough with projecting scales rigid leaves.

**squarrolous** (skwór'ólos) *a.* [*L.L. squarrosus* scurfy] Tending to become squarrose.

**stachysporous** (sták'sós porús) *a.* [*Gk. stachy* ear *f. corni sphaerus* seed.] Bearing sporangia on axis as *Salaginella* *f. phyllosporous*.

**stadium** (stád'íum) *n.* [*L. stare* to stand.] A stage in development or life-history of plant or animal stage interval between two successive ecdyses in insects.

**tag horned** (stág'hórn'd) *a.* [*Icel. stiga* to mount *A.S. horn*.] Having large branched mandibles, as a stag-beetle.

**stagnicolous** (stágnik'ólos) *a.* [*L. stagnum* standing water *colere* to inhabit.] Living or growing in stagnant water

stalk-cell,—the barren cell of two into which the antheridial cell of gymnosperms divides.

stalk-eyed,—having eyes at end of a short stalk, as in some Crustacea, *app.* sessile-eyed.

**stamen** (stám'én) *n.* [*L. stamen* warp] The male organ of flower consisting of stalk or filament with anther containing pollen.

**staminal** (stám'ínál) *a.* [*L. stamen* warp.] *Part* a stamen.

**staminate** (stám'ínát) *a.* [*L. stamen* warp.] Producing or consisting of stamens.

**staminiferous** (stámínif'érús) *a.* [*L. stamen* warp *ferre* to bear] Stamigerous stamen-bearing

**staminod** (stám'ínód) *n.* [*L. stamen*, warp *Gk. eides* form.] A foliaceous scale-like body in some flowers, derived from a metamorphosed stamen rudimentary imperfect, sterile stamen staminodium.

**staminody** (stám'ínodí) *n.* [*L. stamen* warp; *Gk. eides* form.] Metamorphosis of flower organs into stamens.

**standard** (stánd'árd) *n.* [*O.F. estandard* from *L. stare* to stand.] The ventrum or upper petal in Papilionaceae tree or shrub not supported by wall.

**stapedius** (stáp'éd'íus) *n.* [*L.L. stapes* stirrup] A muscle pulling the head of the stapes.

**tapes** (stáp'péz) *n.* [*L.L. stapes* stirrup] Stirrup-shaped innermost bone of middle ear operculum or internal end of columella auris, fitting into and filling fenestra ovalis in amphibia.

**starch** (stárch) *n.* [*A.S. stær* stiff.] The common carbohydrate formed by plants and stored in seeds ( $C_6H_{10}O_5$ )<sub>n</sub>.

**starch sheath**,—endodermis with starch grains.

**stasimorphy** (stás'tmór'fí) *n.* [*Gk. stasis* standing *morphe* form.] A deviation in form due to arrested development.

**stasis** (stās'is) *n* [Gk. *stasis* stand-  
ing] Stoppage or retardation, as of  
growth, or of movement of animal  
fluids.

**stathmokinnesia** (stāth mokin'ō'sis) *n*  
[Gk. *stathmo* station *hinesis* move-  
ment] Inhibition of cell di-  
vision as by colchicine or other  
agent

**statē** (stā'tē) *n*. [Gk. *stathe*  
causing to stand] *Peri* system at  
rest or in equilibrium *app*  
postural reactions *app* kinetic  
*app* proprioceptors as otoliths  
and semicircular canals.

**statoblast** (stā'tōblast) *n*. [Gk.  
*stater* stationary *blasto* bud] A  
specialized bud winter-egg  
of some Polyzoa, developed on  
funiculus and set free on death of  
parent organism.

**statocoon** (stā'tōkōn) *n*. [Gk. *stater*  
stationary *koon* dust.] A minute  
structure contained in a statocyst.

**statocyst** (stā'tōkist) *n* [Gk. *stater*  
stationary *kystis* bladder] A  
mass of many invertebrates with  
function of perception of position of  
body in space a statocyte or geo-  
perceptor cell containing stato-  
liths

**statocyte** (stā'tōsit) *n* [Gk. *stater*  
stationary *kystis* hollow] A cell  
containing statoliths

**statolith** (stā'tōlith) *n* [Gk. *stater*  
stationary *lithos* stone.] A struc-  
ture of calcium carbonate sand  
grain or secreted substance con-  
tained in statocyst as cell  
inclusion as oil droplet, starch  
grain, crystal which changes its  
intracellular position under the in-  
fluence of gravity

**statolithoid** (stā'tōlithoid) *n* [Gk.  
*stater* stationary *lithos* rod] A  
short conical process carrying  
the statolith in Trachomedusae

**statospore** (stā'tōspōr) *n* [Gk. *stater*  
stationary *sporē* seed] A resting  
spore.

**staurophyll** (stā'rōfil) *n* [Gk.  
*stauros* palmad *phyllon* leaf]  
A leaf having palmate or other  
compact tissue brought out

**taupain** (stāp'sin) *n* [Gk. *stear*  
tallow *phain* digestion.] A lipo-  
lytic enzyme of pancreatic juice.

**stearin** (stā'stin) *n* [Gk. *stear*  
tallow] The solid part of fat, held  
dissolved by olein at body tempera-  
ture a component of many animal  
and vegetable fats

**steganopodous** (stēgānōp'ōdūs) *a*.  
[Gk. *stegano* covered *podous* foot.]  
Having feet completely webbed  
totipalmate.

**stere** (stē'ē stē'ē) *n* [Gk. *stere*  
roof] The inner layer of rods of  
Corti.

**stegocarpous** (stēg'ōkār'pōs) *a*. [Gk.  
*stegano* to cover *carpos* fruit.]  
Having a capsule with operculum  
and peristome stegocarpic.

**stegocrotaphic** (stēg'ōkrōtā'fik) *a*.  
[Gk. *stere* roof *crotaphos* the  
temples.] *App* skull whose only  
gaps on dorsal surface are  
nares orbits and parietal for-  
amen.

**stellar parenchyma**,—pith  
**stellar syst m**,—of plants, vessels  
and associated conjunctive tissue

**stel** (stē'ē) *n* [Gk. *stela* pillar] A  
bulky strand or cylinder of vascular  
tissue contained in stem and root of  
plants, developed from pterome

**stellar** (stē'lār) stellate (stē'lāt) *a*  
[L. *stella* star] Astral radiating  
star-shaped *app* leaf sponge  
pecul cells, ganglion stell-  
form

**stellat** tectulum,—enamel pulp of  
dental germ

**stelocytar** (stē'lōk'ār'ia) *a*. [Gk.  
*stela* pillar *kystar* honey-comb  
cell.] Building *peri* stalked  
combs, as of certain wasps of  
phragmocytarous.

**stem** (stēm) *n* [A.S. *stemma* tree  
stem] Main axis of plant.

**stem body**—equatorial part of the  
pindle between two nuclei in  
telophase

**stem cell**,—a primordial germ-cell.  
**stemma** (tēm'a) *n* [Gk. *stemma*  
garland.] A simple eye or ocellus  
of rthropod lateral ocellus  
an ocellus of an ornamental m

- stenobaric** (stén'òbàr'ík) *a.* [Gk. *stenos* narrow *baros* weight.] *Appl.* animals adaptable only to small differences in pressure or altitude of eurybaric.
- stenobathic** (stén'òbàth'ík) *a.* [Gk. *stenos* narrow *bathos* deep.] Having narrow vertical range of distribution. *opp.* eurybathic.
- stenochoric** (stén'òkòr'ík) *a.* [Gk. *stenos* narrow *choros* place.] Having narrow range of distribution.
- stenocyst** (stén'òst) *n.* [Gk. *stenos* narrow *kystis* bladder.] One of the auxiliary cells in leaves of certain mosses.
- stenohaline** (stén'òhàl'ín) *a.* [Gk. *stenos* narrow *halinos* saline.] *Appl.* organisms adaptable to narrow range of salinity *opp.* euryhaline.
- stenohygic** (stén'òhi'grík) *a.* [Gk. *stenos* narrow *hygros* wet.] *Appl.* organisms adaptable to narrow variation in atmospheric humidity.
- stenomorphi** (stén'omòr'fík) [Gk. *steno* narrow *morphos* form.] Dwarfed smaller than typical form, owing to cramped habitat.
- stemonian** *d. et c.*—Stensen duct.
- stenonotal** (stén'onò'tál) *a.* [Gk. *stenos* narrow *notos* back.] With very small thorax, as worker insect.
- stenopetalous** (stén'òpèt'álús) *a.* [Gk. *steno* narrow *petalon*, leaf.] With narrow petals.
- stenophagous** (stén'òf'ágús) *a.* [Gk. *stenos* narrow *phagos* to eat.] Subsisting on limited variety of food, *opp.* euryphagous of monophagous.
- stenophyllous** (stén'òfil'ús) *a.* [Gk. *stenos* narrow; *phyllon* leaf.] Narrow-leaved.
- stenosepalous** (stén'òsép'álús) *a.* [Gk. *steno* narrow *F. sepal* sepals.] With narrow sepals.
- stenoctomatous** (stén'òstèn'átús) *a.* [Gk. *stenos* narrow *stoma*, mouth.] Narrow mouthed.
- stenotherm** (stén'òthér'mík) *a.* [Gk. *stenos* narrow *thermos* heat.]

- Appl.* organisms adaptable only to slight variations in temperature *opp.* eurythermic.
- stenotopic** (stén'òtòp'ík) *a.* [Gk. *stenos* narrow *topos* place.] Having a restricted range of geographical distribution, *opp.* eurytopic.
- stenotropic** (stén'òtròp'ík) *a.* [Gk. *stenos* narrow *trope* turn.] Having very limited adaptation to varied conditions.
- Stensen's duct** [*N. Stensen* Danish physiologist] Duct of parotid gland.
- stephan** *n.* (stéfil'n) [Gk. *stephanos* crown.] The point where superior temporal ridge is crossed by coronal suture.
- step** (stép) [Russ. *step*] Xerophilous and generally treeless grassland short-grass plains.
- stercobilin** (stér'kòb'ilín) *n.* [L. *stercus* dung *bilis* bile.] The brown pigment of faeces urobilin  $C_{28}H_{40}O_4N$ .
- stercocarium** (stér'kòk'árium) *n.* [L. *stercus* dung] The system of stercum containing tubes of certain Sarcodina.
- stercosae** (stér'kòs) *n.* [L. *stercus* dung] Faecal matter of Sarcodina, in masses of brown granules.
- tercoral** (stér'kòr'al) *a.* [L. *stercus* dung] *Peri* faeces *appl.* dorsal pocket or sac of proctodaeum in spiders.
- steroid** (stér'òid) *n.* [Gk. *steros* solid *eidos* form.] A lignified parenchyma cell with pit canals stone cell, *qv.*
- st. eld bundl** *n.*—bands or bundles of sclerenchymatous fibres.
- ste. blastula** (stér'òblàst'úlà) *a.* [Gk. *steros* solid *blastos* bud.] Abnormal form of echinoid larva unable to gastrulate.
- stereocilia** (stér'òsèl'íà) *n. pl.* [Gk. *steros* rigid *L. cilium* eyelash.] Non-motil secretory projections on epithelium of duct of epididymis.
- stereognosti** (stér'ògnòs'tík) *a.* [Gk. *steros* solid *L. gnosco* to know] *Appl.* sense which perceives size, shape weight.

**stereokinesis** (stēr'ōkīnē'sis) *n* [Gk. *stereos* solid *kinesis* move- ment.] Movement or inhibition of movement in response to contact stimuli thigmotaxis.

**stereoma** (stēr'ōm) *n* [Gk. *stereoma* solid body] Sclerenchymatous and collenchymatous masses along with hardened parts of vascular bundles forming supporting tissue in plants the thick walled elongated cells of the central cylinder in mosses.

**stereoplasma** (stēr'ōplāzm) *n* [Gk. *stereos* solid *plasma* mould.] The more solid part of protoplasm, opp hytoplasma a vesicular substance filling interseptal spaces of certain corals.

**stereospondylous** (stēr'ēspōndīlōs) *a*. [Gk. *stereos* solid *spondylus* vertebra.] Having vertebrae each fused into one piece of tetra- spondylous.

**stereotaxy** (stēr'ēotāk'sis) *n* [Gk. *stereos* solid *taxis* arrangement.] The mechanical reaction to con- tinuous contact with a solid.

**stereotropism** (stēr'ēōtrōpizm) *n* [Gk. *stereos* solid *trope* turn.] Tendency of organisms to attach themselves to solid objects, or to live in crannies or tunnels in total contact with solids thigmotaxis.

**sterigma** (stēr'ig'mā) [Gk. *stereigma* point] A slender filament arising from basidium or conidia phore and giving rise to spores by division. flagellum rib-like part of d. m. flagellum along be stem *Phy. sterigmata*.

**sterile** (stēr'il) *a*. [L. *sterilis* barren.] Incapable of propagation veget.

**sterilise** (stēr'ilis) [L. *steril* barren.] To render incapable of reproduction or of convey- g. n-fection.

**sternal** (stēr'nāl) *a*. [Gk. *sternon* chest.] Pert. sternum, or termite *Appl* ribs united to sternum.

**sternite** (stēr'nēb'it) *n* *plu* [L. *sternum* breast bone *stern* on analogy of vertebra.] Divisions of segmented sternum as breast bone.

**sternellum** (stēr'nēl'ūm) *n* [Dim of L. *sternum* breast bone.] A sternal sclerite of insects sclerite behind mesosternum poststernite.

**sternite** (stēr'nit) *n* [Gk. *sternon* chest.] A ventral plate of an arthropod segment a sternal sclerite.

**sternoclavicular** (stēr'nōklāvīk'ulār) *a*. [L. *sternum* breast bone *clavicula* small key] *Appl* and part articulation between sternum and clavicle.

**sternocostal** (stēr'nōkōst'al) *a*. [L. *sternum* breast bone *costa* rib.] Pert. sternum and ribs *Appl* liga- ment surface of heart.

**sternocleidomastoid** (stēr'nōklēdō- mā'stōid) *n* [Gk. *sternon* chest *clavis* key *mastris* breast *oides* form.] *Appl* an oblique neck muscle stretching from sternum to mastoid process.

**sternopleurite** (stēr'noplōrit) *n* [Gk. *sternon* chest *pleura* side.] Thoracic sclerite formed by union of episternum and sternum in insects sternopleuron.

**sternoscapular** (stēr'nōskāp'ulār) *a*. [L. *sternum* breast bone *scapula* shoulder-blade.] *Appl* a muscle connecting sternum and scapula.

**sternotribes** (stēr'nōtrīb) *a*. [Gk. *sternon* chest *tribes* to rub.] *Appl* flowers with fertilising elements so placed as to be brushed by sternules of visiting insects.

**sternoxiphoid** (stēr'nōksīf'oid) *n* [Gk. *sternon* chest *xiphos* sword *oid* form.] *Appl* plane through junctio- of sternum and xiphoid cartilage.

**sternum** (stēr'nūm) *n* [L. *sternum* breast bone.] Breast bone of verte- brates ventral plate of typical arthropod segment.

**sternum** (stēr'nūm) *n* *plu* [Gk. *sternon* solid *sternon* chest] Alcohol- of dry be structure including the cyclopentaphenanthrene ring found in plants and animals, and comprising the myosterol phytol- and steroid.

sterraster (stér'stér) *n.* [Gk. *sterrós* solid *aster* star] Aster with actines soldered together by silica.

sterrula (stér'ülá) *n.* [Gk. *sterrós* solid.] Solid free-swimming larva of Alcyonaria, preceding planula.

stichidium (stíkk'idíum) *n.* [Gk. *stíchos* row *idion, idion.*] A tetraspore receptacle of some algae.

stichochræma (stík'ók'rém) *a.* [Gk. *stíchos* row *chrómæ* colour] With Nissl granules arranged in rows, as in motor neurones.

stigma (stíg'má) *n.* stigmata (stíg'mátá) *pl.* [Gk. *stigma*, mark.] Pl. of pistil which receives pollen; eye-spots of some protozoa; an arthropod piracle; apertures connected with tracheae of insects; coloured wing spot of certain butterfly flies and other insects; gill-slits of tunicates; spots or stomata formed as artefacts in walls of capillaries.

stigmati (stígmát'ík) *a.* [Gk. *stigma*, mark.] *Appl.* lid cell of an archegonium *part* stigma.

stigmatiferous (stígmátíf'érús) [Gk. *stigma*, mark *L. ferre* to carry] Stigma-bearing.

stigmatiform (stíg'mátí'fórm) *a.* [Gk. *stigma*, mark *L. forma*, shape.] Resembling stigma stigmatoid.

stile(t),—see style(t)

stilt-roots,—buttress-roots *q.v.*

stimulant (stím'ülánt) [L. *stimulare* to incite.] A stimulus-producing agent.

stimulation (stím'ülá'shún) *n.* [L. *stimulare* to incite.] Excitation or irritation of an organism or part by external or internal influences.

stimulose (stíu'ülós) *a.* [L. *stimulare* to incite.] Furnished with stinging hairs; cells.

stimulus (stím'ülús) *n.* [L. *stimulus* goad.] An agent which causes reaction or change in an organism or in any of its parts; stinging hair.

sting (stíng) *n.* [A.S. *stíngan* to sting] Stinging hair or cell; spine of sting-ray; offensive and defen-

sive organ for piercing; also for inoculating with poison.

stipe (stíp) *n.* [L. *stipes* stalk.] The stem bearing pileus in agarics; stalk of seaweeds; stem or caudex of palms and tree-ferns; stem of fern fronds; a stipes.

stipal (stíp'él) *n.* [L. *stipes* stalk.] An outgrowth of leaflets resembling the stipule of a leaf-base.

stipella (stíp'él'á) *n.* [Dim. from L. *stipes* stalk.] Stipule; leaflet in compound leaf.

stipellate (stíp'él'át) *a.* [L. *stipes* stalk.] Bearing stipes.

stipes (stíp'és) *n.* [L. *stipes* stalk.] Peduncle of a stalked eye; distal part of protopodite; first maxilla of insects, trachei divided into eustipes and parastipes, and the eustipes further into dististipes, proxistipes and basistipes.

stipiform (stíp'í'fórm) *a.* [L. *stipes* stalk *forma* shape.] Resembling stalk or stem.

stipitat (stíp'ít'át) *a.* [L. *stipes* stalk.] Stalked.

stipit (stíp'ít's) *pl.* [L. *stipes* stalk.] *Pl.* of stipes; paired part anterior to mentum; f. gnathochilarium.

stipular (stíp'ül'ár) *a.* [L. *stipula* small stalk.] Like *part* or growing in place of stipules; stipellar.

stipulate (stíp'ül'át) *a.* [L. *stipula*, small stalk.] With stipules; stipuliferous.

stipal (stíp'ál) [L. *stipula*, small stalk.] One of two foliaceous membranaceous processes developed at base of leaf petiole, sometimes in tendril or spine form; paraphyll *q.v.*

stipuliform (stíp'ül'í'fórm) *a.* [L. *stipula* small stalk *forma* shape.] In the form of stipul.

stipuloid (stíp'ül'óid) *n.* [L. *stipula*, small stalk *Gk. eidos* form.] A unicellular outgrowth from basal nod. of branches in Charophyta.

stirp (stérp) stirps (sté'ups) *n.* [L. *stirps* stock.] The sum-total of germs or gemmules to be found in newly fertilised ovum.



- stock** (stók) *n.* [A.S. *stoc* post.] Stem of tree or bush receiving bud, or scion, in grafting a gilliflower an asexual zooid which produces sexual zooids of one sex by gemmation, as in Polychaeta live stock.
- stolon** (stólón) *n.* [L. *stolo* shoot.] A creeping stem or runner capable of developing rootlets and stem, and ultimately forming a new individual a cylindrical stem of some Polyzoon from which individuals grow out at intervals a horizontal tubular branch of some coelenterates from which new zooids arise by budding the cadophore and bud-forming ventral outgrowth of tunicates.
- stolonate** (stólónát) *a.* [L. *stolo* shoot.] Having stolons resembling a stolon developing from a stolon *appl* plants and animals which develop by means of stolons stoloniferous.
- st má** (stó má) *n.* stomata (stóm átá) *plu.* [Gk. *stoma* mouth] A small orifice minute penings, with guard cells, in epidermis of plants, especially on under surface of leaves, or the stomatic pores only *peritres m endothelium f serous membranes* part of alimentary canal between mouth opening and oesophagus in nematodes.
- st má b** (stóm ák) [Gk. *stomachus* throat, gullet.] Ventriculus sac like portion of food canal beyond gullet in vertebrates correspond by part, or entire digestive cavity of invertebrates.
- st machic** (stómák'ík) *a.* [Gk. *stomachus* gullet.] *Part* the stomach.
- st mátal** (stóm átál) *a.* [Gk. *stoma* mouth] *Part* or like a stoma stomatic.
- stomat** (stó márt) *a.* [Gk. *stoma*, mouth.] With stoma or stomata.
- stomatic** (stómát'ík) *a.* [Gk. *stoma* *Part* or like stoma *appl* pore stomatal
- stomatiforous** (stómátif'érús) [Gk. *stoma* mouth *L. ferre* to carry] Bearing stomata.

- tomatogastric** (stóm'átógás'trík) *a.* [Gk. *stoma*, mouth *gaster* stomach.] *Part* mouth and stomach *appl* visceral system of nerves supplying anterior part of alimentary canal *appl* recurrent nerve from frontal to stomachic ganglion in insects.
- stomatose, stomatous, —stomate.**
- stomidium** (stómd'íúm) *n.* [Gk. *stoma*, mouth, *idion*, *div.*] Aperture representing terminal pore of degenerated tentacles of Actiniana.
- stomions** (stóm'íons) *n.* *plu* [Gk. *stomion*, small mouth.] Dermal pores or ostia perforating dermal membranes of developing sponge.
- st ml m** (stó'ml'ím) *n.* [Gk. *stomion* small mouth.] Group of thin walled cells in fern sporangium where rupture of mature capsule takes place *sitt* of dehiscing anther
- stomocoel** (stóm'óseí) *n.* [Gk. *stoma*, mouth *kollos* hollow] System of cavities in lips.
- st modaeal canal, —in Ctenophora,** canal given off by each per radial canal, and situate parallel to tom-odaeum.
- st modaeum** (stóm'ódé'ím) *n.* [Gk. *stoma* mouth *odaios* *part. way*] Anterior ectoderm-lined portion of alimentary canal anterior pitted-in portion of embryonic gut.
- ston canal, —madreporic canal** an S-shaped cylinder extending from madreporite to near mouth border in echinoderms hydromorphic canal.
- stone cells, —sclerotic cells** or rounded sclerenchymatous elements found in pear brachysclerids.
- strangulated** (stráng'gúllítéd) *a.* [L. *strangulare* to throttle.] Constricted in places contracted and expanded irregularly
- strata, —plu** of stratum.
- stratification** (strát'ífiká hó) *n.* [L. *stratum* layer *facere* to make.] Arrangement in layers superimposition of layers of epithelium cells vertical group *g* within a community

stratified epithell *m.*, — epithelium cells arranged in many a perimposed layers.

stratiform (strā'tŏrm) *a.* [L. *stratum*, layer *forma*, shape.] *Appl.* fibrocartilage coating osseous grooves or developed in some tendons.

stratose (strā'tōs) *a.* [L. *stratum*, layer] Arranged in layers.

stratum (strā'tŏm) *n.* [L. *stratum* layer] A layer as of cells, or of tissue group of organisms inhabiting vertical division of an area; vegetation of similar height in a plant community as trees, shrubs, herbs, and mosses a layer of rock. *Pls* strata.

stratum compactum, — surface layer of decidua vera.

stratum corneum, — horny external layer of epidermis.

stratum cylindricum, — inner ectodermal layer surrounding mesodermal pulp of feather

stratum fibrosum, — external fibrous tissue of articular capsule.

stratum g. ruminativum, — Malpighian layer or rete Malpighii *g.*

stratum granulosum, — superficial layer of rete mucosum of skin.

stratum lucidum, — layer of cells between stratum corneum and stratum granulosum of skin.

stratum opticum, — layer of nerve fibres constituting innermost layer of retina; layer of multipolar nerve cells of anterior corpora quadrigemina, *cf* stratum zonale.

stratum spongiosum, — deeper three fourths of decidua vera

stratum synoviale, — external stratum of articular capsule synovial membrane, *g.*

stratum zonale, cinereum, opticum, lemnisci, — strata of anterior corpora quadrigemina, from surface inwards.

streptema (strēp sin'mā) *n.* [Gk. *streptos* twisting *maia* thread.] Chromosome thread at the streptotene stage

streptelon (strēp alŏn) *n.* [Gk. *streptos* twisting *elōn*, band.] *Appl* stage in meiosis where the

diplotene threads appear to be twisted.

streptostylic (strēp ōstŏl'ik) *a.* [Gk. *streptos*, pliant *stylos* column.] Exhibiting streptostyly or having quadrate in movable articulation with squamose / monimostylic.

stria (strĭ'ā) *n.* [L. *stria* groove, channel.] A narrow line streak, band, groove or channel.

striated (strĭ'ātd) *a.* [L. *striatus* grooved.] Marked by narrow lines or grooves, usually parallel.

striated muscle, — voluntary muscle, fibres presenting transverse striations bundles of fibres enclosed in sheath continuous with tendons.

striatum (strĭ'tŏm) [L. *striatus* grooved] Corpus striatum *g.*

stridulating organs, — a special apparatus on metathoracic and anterior abdominal segments for producing song of cicadas sound producing organs of various other Arthropoda.

striga (strĭ'gā) *n.* [L. *striga*, ridge furrow] A band of upright, stiff pointed hairs or bristles bristle like scale.

strigate (strĭ'gāt) *a.* [L. *striga*, ridge] Bearing strigae.

strigilla (strĭ'illā) *n.* [L. *strigilla* curry-comb.] A mechanism for cleaning antennae, at junction of tibia and tarsus on first leg *f* bees.

strigillose (strĭ'illōs) *a.* [L. *strigilla* small ridge.] Minutely strigose.

strigose (strĭ'gōs) *a.* [L. *striga*, ridge] Covered with stiff hairs ridged marked by small furrows.

triola (strĭ'ōlā) *n.* [L. *striola*, small channel.] Fine narrow line or streak.

triolate (strĭ'ōlāt) *a.* [L. *striola* small channel.] Finely striate.

stripe of Hensen, — *see* Hensen stripe.

strobila (strōb'illā) [Gk. *strobilos* for cone.] Stage in development of some Scyphozoa, where from a succession of annular discs embryos take form of a pile of discs separated off in turn chain of proglottides of tapeworms.

**strobilaceae** *na* (strób'íl's shíá) *n* [Gk. *strobilos* fir cone.] Cone-shaped part or having strobiles.

**strobilation** (strób'íl'shín) *n* [Gk. *strobilos* fir cone.] Reproduction by body-segmentation into zooids as in coelenterates, or into proglottides as in tape-worms strobilation.

**str bile** (strób'íl) *n*. [Gk. *strobilos* fir cone.] A strobila, or strobilus a spike formed of persistent membranous bracts, each having a pistillate flower a cone an assemblage of sporophylls.

**str billiferous** (strób'íl's értá) *a*. [Gk. *strobilos* fir cone *L. ferre* to carry] Producing strobiles.

**str biloid** (strób'ílóid) *a* [Gk. *strobilos* fir cone *oides* form.] Strobiliform resembling shaped like a strobilus or cone.

**strobilius** (strób'íl's) *n* [Gk. *strobilos* fir cone] A strobile cone

**str ma** (stró'má) *a*. [Gk. *stroma* bedding] Transparent filmy framework of red blood corpuscles protoplasmic body of a plastid connective tissue body and supporting an organ in ovary a soft, vascular reticular framework in meshes of which ovarian follicles are imbedded in *plu* stromata, short protrusions from sclerotium each composed of hyphae in which perithecia are developed some thallophytes

**str mati** (strómá'tík) *a* [Gk. *stroma* bedding] Part like in form or nature of stroma stromat form stromatous stromated

**stromatolys s** (stró'mától'ís) *n* [Gk. *stroma* bedding *lysis* loosening] Continued action of haemolysin on a stroma after haemoglobin has been liberated

**strombulferrous** (stróm'búll's értá) *a* [Dim of *L. strombus* spiral snail *ferre* to carry] Having spirally coiled regular structures

**strombuliform** (stróm'búll'fórm) *a* [Dim of *L. strombus* spiral snail *forma* shape] Spirally coiled

**strongyl** (strón'jíl) **strongylon** (strón'jílón) *n* [Gk. *strongyle* rounded.] A two-rayed rod sponge plicule rounded at both ends a nematode

**strophiolate** (stróf'íólat) *a*. [L. *strophilium* small garland.] Having excrescences round hilum.

**str phioles** (stróf'íóls) *n plu* [L. *strophilium* small garland.] Small excrescences arising from various parts of a seed testa never developed before fertilisation caruncles.

**str photaxis** (stróf'fák'sh) *n* [Gk. *trapha* twisted *axis* arrange ment] Twisting movement or tendency in response to an external stimulus.

**struma** (stróm'a) *n* [L. *struma* scrofulous tumour] A swelling on a plant organ.

**strumiferous** (stróm'íf'értá) *a*. [L. *struma* tumour *ferre* to carry] Having a struma or strumae.

**strumiform** (stróm'íf'fórm) *a*. [L. *struma* wen *forma* shape] Cushion-like.

**strumose** (stróom'sé) **strumulose** (stróom'úlé) *a* [L. *struma* wen.] Having small cushion-like swellings.

**strut roots**,—buttress roots, *p.s* **stupaceous** (stú'péás) **stupose** (stú'pós) *a* [L. *stupa* tow] Tow-like having a tuft of twisted filaments.

**stupalos** (stú'pálos) *a* [L. *stupa* tow] Covered with short filaments.

**style** (stí'lár) *a* [L. *stylus* prickler] Part styl

**stylate** (stí'lát) *a* [L. *stylus* prickler]

Having a styl or styles.

**styl** (stí'l) *n* [Gk. *style* pillar *L. stylus* prickler] Slender part of part supporting a stigma a rod-like sponge pedicel pointed at one end calcareous projection from pore tabula in some *Millepora* abdominal bristle-like process on male murex antea emblem of pulch

**stylot** (stí'lét) *a* [L. *stylus* prickler] Small pointed bristle-like appendage lancet of trachea or sting held in point in by stylot sheath.

**stylifer** (stī'fīfēr) *n.* [*L. stylus* pricker *ferre* to carry] Portion of chaper which carries style.

**styliferous** (stī'fīfērūs) *a.* [*L. stylus* pricker *ferre* to carry] Bearing style having bristly appendages

**styliform** (stī'fīfōrm) *a.* [*L. stylus* pricker *forme* shape.] Pricker or bristle-shaped.

**stylocon** (stī'lōkōn'īk) *a.* [*Gk. stylus* pillar *konos* cone.] H wing terminal peg on conical base *appl.* type of olfactory sensilla in insects.

**styloglossal** (stī'lōg'ōs'āl) *a.* [*Gk. stylus* pillar; *glossa*, tongue.] *Part.* styloglossus muscle connecting styloid process and tongue.

**stylogonidi** *m.*—conidium, *g.s.*

**stylohyal** (stī'lōhī'āl) *a.* [*Gk. stylus* pillar *hyoides* Y-shaped.] Distal part of styloid process of temporal bone small interhyal between hyal and hyomandibular

**stylohyoid** (stī'lōhī'ōid) *a.* [*Gk. stylus* pillar *hyoides* Y-shaped.] *Appl.* ligament attached to styloid process and lesser cornu of hyoid *appl.* a muscle *appl.* a branch of facial nerve.

**styloid** (stī'lōid) *a.* [*Gk. stylus* pillar *oides* form.] *Appl.* processes of temporal bone, fibula, radius, ulna.

**stylomandibular** (stī'lōmāndī'bī'lār) *a.* [*Gk. stylus* pillar, *L. mandibularis* jaw] *Appl.* ligamentous band extending from styloid process of temporal bone to angle of lower jaw

**stylo mastoid** (stī'lōmāstōid) *a.* [*Gk. stylus* pillar *mastos* breast; *oides* like.] *Appl.* foramen between styloid and mastoid processes, also an artery entering that of same.

**stylopharyngeus** (stī'lōfārīn'jōs) *a.* [*Gk. stylus* pillar *pharynx* pharynx.] A muscle extending from the base of styloid process downwards along side of pharynx.

**stylopodium** (stī'lōpō'dīūm) *a.* [*Gk. stylus* pillar; *four* foot.] A conical swelling surrounding bases of divergating styles of Umbelliferae upper arm, or thigh.

**stylospore** (stī'lōspōr) *a.* [*Gk. stylus* pillar *spora* seed.] A stalked spore, as in Coniomyces; conidium.

**stylosporous** (stī'lōs'pōrūs) *a.* [*Gk. stylus* pillar; *spora* seed.] *Part.* stylospore or conidium.

**stylostegium** (stī'lōstē'jīūm) *a.* [*Gk. stylus* pillar *stige* roof.] Inner corona of milk weed plants.

**stylost** *m.* (stī'lōstōm) *a.* [*L. stylus* pricker *Gk. stoma*, mouth.] A tube in skin produced by tissue reaction of host to insertion of chelicerae of a mite.

**stylus** (stī'lōs) *a.* [*L. stylus* pricker] A styl; stylet; simple pointed spicule molar cusp; pointed process.

**subabdominal** (sūb ābdōm'īnāl) *a.* [*L. sub* under *abdomen* belly] Nearly to abdominal region.

**subacuminate** (sūb ākū mīnāt) *a.* [*L. sub* under, *acumen* point.] Somewhat tapering

**subaduncat** (sūb ādūng'kāt) *a.* [*L. sub* under *aduncus* hooked.] Somewhat crooked.

**subaerial** (sūb āēr'īāl) *a.* [*L. sub* under *air* air.] Growing just above surface of ground.

**subalpine** (sūb āl pīn) *a.* [*L. sub* under; *alpinus* alpine.] *Appl.* zone below timber line, or to plants or animals growing or living there.

**subalternate** (sūb āltēr'nāt, -ōl) *a.* [*L. sub* under *alternus* one after another] Tending to change from alternate to opposite.

**subanconous** (sūb āngkōn'ōs) *a.* [*L. sub* under *Gk. ankon* elbow] Small muscle extending from triceps to elbow

**subapical** (sūb āp'īkāl) *a.* [*L. sub* under *apex* extremity] Nearly at the peak.

**arachnoid** (sūb ārāk'nōid) *a.* [*L. sub* under *Gk. arachne* spider's web *oides* form.] *Appl.* a cavity filled with cerebrospinal fluid between arachnoid and pia mater, *appl.* crurae of brain, and longitudinal septum in region of spinal medulla.

subarboresc nt (sŭb'ar-bŏr'ĕs ent) a. [L. *sub* under *arborescens* growing into a tree.] Somewhat like a tree.

subarcuate (sŭb'ar'kŭat) a. [L. *sub* under *arcus* bow] *Appl* a blind fossa which extends backwards under superior semicircular canal in infant skull.

subatrial (sŭb'ā'triāl) a. [L. *sub* under *atrium* hall.] Below the atrium *Appl* longitudinal ridges on inner side of metapleural folds uniting to form ventral part of atrium in development of lancelet.

subauricular (sŭb'ŏr'ik ūlār) a. [L. *sub* under *auricula* external ear] Below the ea

subaxillary (sŭb'āk's'illār) a. [L. *sub* under *axilla*, arm pit.] *Appl* outgrowths just beneath the axil.

sub-basal (sŭb-bā'sāl) a. [L. *sub* under Gk. *basis* foundation.] Situated near the base

sub-branchial (sŭb-brā'ng'kiāl) a. [L. *sub* under Gk. *branchia* gills] Under the gills

sub-b onchial (sŭb-brŏ'ng'kiāl) a. [L. *sub* under Gk. *branchia* windpipe.] Below the branchials

subcalcar us (sŭb-kāl'kār ūs) a. [L. *sub* under *calcar* lime] Some what limy

subcalcarine (sŭb-kāl'kār'īn) a. [L. *sub* under *calcar* ps] Under the calcarine fissure *Appl* lingual gyrus of brain.

subcallous (sŭb-kāl'ŭs) a. [L. *sub* under *callus* hard skin] *Appl* a gyrus below corpus callosum.

subcampanul (sŭb-kāmp'ān ūl) a. [L. *sub* under *campanula* little bell] Somewhat bell-shaped.

subcapsular (sŭb-kāp'sŭlār) a. [L. *sub* under *capsula* little chest] Inside capsule

subcardinal (sŭb-kār'dināl) a. [L. *sub* under *carda* lunge] *Appl* part of veins between mesonephros

subcarinat (sŭb-kār'īnāt) a. [L. *sub* under *carina* keel] Somewhat keel-shaped

subcartilaginous (sŭb'kār'tilāj'īnŭs) a. [L. *sub* under *cartilage* gristle.] Not entirely cartilaginous.

subcaudal (sŭb-kŭd'āl) a. [L. *sub* under *cauda* tail.] Situate under tail as a shield or plat

subcaudate (sŭb-kŭd'āt) a. [L. *sub* under *cauda* tail.] Having a tail-like process.

subcaulescent (sŭb'kŭl's'ent) a. [L. *sub* under *caulis* stalk.] Borne on very short stem.

subcellular (sŭb-sĕ'lŭlār) a. [L. *sub* under *cellula* small cell.] *Appl* functional units within the cell as chloroplasts chromosomes etc.

subcentral (sŭb-sĕn'trāl) a. [L. *sub* under *centrum* centre.] Nearly central

subchela (sŭb-kĕ'lā) n. [L. *sub* under Gk. *chele* claw] A prehensile claw of which last joint folds back on preceding as in Squilla.

subchelate (sŭb-kĕ'lāt) a. [L. *sub* under Gk. *chele* claw] Having subchela having imperfect chela

subcheliceral (sŭb-kĕ'l's'ĕrāl) a. [L. *sub* under Gk. *chele* claw *keras* horn.] Beneath the chelicerae *Appl* plat or epistome / attachment of pharyngeal dilators to certain Acarina.

subchordal (sŭb-kŏr'dāl) a. [L. *sub* under *chorda* cord.] Under the notochord.

subcingulum (sŭb-sĭng'ŭlŭm) n. [L. *sub* under *cingulum* girdle.] The lower 1/2 part of cingulum or girdle of rotifers

subclavate (sŭb-kllāvāt) a. [L. *sub* under *clavus* club] Somewhat cl b-shaped.

subclavian (sŭb-kllāvīn) a. [L. *sub* under *clavus* key] Below clavicle *Appl* artery vein nerve in axil

subclimax (sŭb-kllī'māks) n. [L. *sub* under Gk. *klímax* ladder] Stage in plant succession preceding final stage proclimax, q =

subcoracoid (sŭb-kŏr'ākŏid) a. [L. *sub* under Gk. *korax* crow *oides* like] Below the coracoid.

subcordate (süb'kôr dät) *a.* [L. *sub* under; *cor* heart.] Tending to be heart-shaped.

subcorneous (süb'kôr' éüs) *a.* [L. *sub* under; *corneus* horn.] Under horny layer slightly horny.

subcortical (sübkört'ikäl) *a.* [L. *sub* under; *cortex* bark.] Under cortex, or cortical layer *appl.* cavities under dermal cortex of pongra.

subcosta (sübköst'ä) *n.* [L. *sub* under; *costa*, rib.] An auxiliary vein joining costa of insect wing.

subcostal (sübköst'äl) *a.* [L. *sub* under; *costa* rib.] Below ribs; *appl.* zona, muscles arteries, plane *part* subcosta.

subcoxa (sübkök'säl) *n.* [L. *sub* under; *coxa*, hip.] Basal ring or segment, articulated distally with coxa of arthropod leg *praecoxa*, prostrochantin.

subcrenate (sübkrest'ä) *a.* [L. *sub* under L.L. *crena*, notch.] Tending to have rounded scallops, as leaf margin.

subcrural (sübkroor'säl) *a.* [L. *sub* under; *crus* leg.] *Appl.* subcrureus or articularis genus muscle extending from lower femur to knee.

subcubical (sübkü'bikäl) *a.* [L. *sub* under; *cubus* cube.] *Appl.* cells not quite so long as broad as those lining alveoli of thyroid.

subcutaneous (süb'kü'tä néüs) *a.* [L. *sub* under; *cutis* skin.] Under the cutis or skin *appl.* parasites living just under skin *appl.* in gumal or external abdominal ring.

subcuticular (süb'kü'tik'ülär) *a.* [L. *sub* under; *cuticula*, cuticle.] Under the epidermis or outer skin.

subcutis (süb'kü'tis) *n.* [L. *sub* under; *cutis* skin.] A loose layer of connective tissue between corium and deeper tissues of skin *telæ subconjunctivæ*.

subdentate (sübdönt'ät) *a.* [L. *sub* under; *dens* tooth.] Slightly toothed or notched.

subdermal (sübdär'mäl) *a.* [L. *sub* under, Gk. *derma*, skin.] Beneath the skin; beneath derma.

subdorsal (sübdö'säl) *a.* [L. *sub* under; *dorsum*, back.] Situated almost on dorsal surface.

subdural (sübdü'räl) *a.* [L. *sub* under; *dura* hard.] *Appl.* the space separating spinal dura mater from arachnoid.

subepiglottic (süb'ëpiglöt'ik) *a.* [L. *sub* under Gk. *ëpi* upon; *glottis* tongue.] Beneath epiglottis.

subepithelial (süb'ëpüb'ë'täl) *a.* [L. *sub* under Gk. *ëpi* upon; *thäl* less to grow.] Below epithelium.

*appl.* plexus of cornea *appl.* endothelium Debove's membrane, *g.s.*

sube (sü'bär) *n.* [L. *suber* cork tree.] Cork tissue.

suberaceous (sübë'ëüs) *a.* [L. *suber* cork-tree.] Of corky texture.

suberitic (sübër'ik) *a.* [L. *suber* cork-tree.] *Part* or derived from cork.

suberiferous (sübër'tiferüs) *a.* [L. *suber* cork-tree *ferre* to bear.] Cork-producing.

suberification (sü'bër'tifikä'shün) *n.* [L. *suber* cork-tree *facere* to make.] Conversion to cork tissue.

suberin (sü'bër'in) *n.* [L. *suber* cork tree.] The waxy substance developed in thickened cell-wall, characteristic of cork tissue.

suberisation (sü'bër'täl'shün) *n.* [L. *suber* cork-tree.] Modification of cell walls d. to suberin formation.

suberose (sü'bër'së) *a.* [L. *suber* cork tree.] With corky waterproof texture. (sübër'së) [L. *sub* under; *erosus* gnawed.] As if somewhat gnawed.

subgalea (sübgäl'ä) *n.* [L. *sub* under; *galea*, helmet.] Part of maxilla, at base of stipes, of insects.

subgenital (süb'jénik'ül) *a.* [L. *sub* under; *genitalium* little knee.] Somewhat bent.

subgenital (sübjén'täl) *a.* [L. *sub* under; *genitalia* genital.] Below reproductive organs *appl.* shallow pit or pouch beneath gonad in Aurelia *appl.* portion formed by fusion of subgenital pouches of Dicomedusae.

**subglenoid** (sŏbglē noid) *n.* [*L. sub* under *Gk. glēnē* socket *oid* form.] Beneath glenoid cavity

**subglossal** (sŏbglē'sāl) *n.* [*L. sub* under *Gk. glōssē* tongue.] Beneath the tongue.

**subharpe** (sŏbhār'pāl) *n.* [*L. sub* under *Gk. harpe* sickle] *Appl.* plate in area below harpe in insects.

**subhyaloid** (sŏbhī'ālōid) *n.* [*L. sub* under *Gk. hyalēs* glass *oid* like.] Beneath hyaloid membrane or *lens* of eye.

**subhymenium** (sŏb'hīmē nīum) *n.* [*L. sub* under *Gk. hymen* membrane] Layer of small cells between trachea and hymenium in gill of agaries.

**subhyoid** (sŏbhī'ōid) *n.* [*L. sub* under *Gk. hyoidēs* T-shaped.] Below hyoid at base of tongue

**subiculum** (sŏbī'ūlūm) *n.* [*L. subiculum* under layer] Filamentous mycelium of certain fungi part of the hippocampus bordering the hippocampal fissure bony ridge bounding oval opening in interior wall (middle ear)

**subimago** (sŏb'īmē gō) *n.* [*L. sub* under *imago* likeness.] A stage between pupa and imago in life history of some insects pseudimago

**sublingual** (sŏbīn'gwīnāl) *n.* [*L. sub* under *linguā* tongue] Situated below a horizontal line at level of great saphenous vein termination *Appl.* lymph-glands.

**subjugal** (sŏb'yōōg'āl) *n.* [*L. sub* under *jugum* yoke] Below jugal or cheek bone

**subjugal** (sŏb'yōōg'ālār jōg') *n.* [*L. sub* under *jugulum* collar bone] *Appl.* ventral fish-fin nearly far enough forward to be jugular

**sublanceolate** (sŏblān'ēōlū) *n.* [*L. sub* under *lanceolatus* peaked] Tending to be narrow and to taper towards both ends.

**sublaryngeal** (sŏblārīn'yēāl) *n.* [*L. sub* under *Gk. larynx* larynx] Situate below larynx

**sublenticula** (sŏblēn'ūlār) *n.* [*L. sub* under *lenticula* small lentil.] Somewhat lens-shaped

**subliminal** (sŏblīm'īnāl) *n.* [*L. sub* under *lumen* threshold] Inadequate for perceptible response *Appl.* stimuli of lumen.

**sublingua** (sŏblīn'gwā) *n.* [*L. sub* under, *lingua* tongue.] A single or double projection or fold beneath tongue in some mammals.

**sublingual** (sŏblīn'gwāl) *n.* [*L. sub* under *lingua*, tongue.] Beneath tongue *Appl.* gland artery etc. *Appl.* ventral pharyngeal gland in Hymenoptera.

**sublittoral** (sŏblīr'ōrāl) *n.* [*L. sub* under *litus* sea-shore] Below littoral *Appl.* shallow water zone to about 100 fathoms sublittoral.

**sublobular** (sŏblōb'ūlār) *n.* [*L. sub* under *lobus* lobe.] *Appl.* veins at base of lobules of liver

**subocular** (sŏblōk'ūlār) *n.* [*L. sub* under *oculus* compartment.] Somewhat focal or cellular

**submalleate** (sŏbmāl'ēāt) *n.* [*L. sub* under *malleus* hammer] Somewhat hammer-shaped *Appl.* trophi of rotifer mastax.

**submarginal** (sŏbmār'jīnāl) *n.* [*L. sub* under *margo* margin.] Placed nearly at margin.

**submarginate** (sŏbmār'jīnāt) *n.* [*L. sub* under *margo* margin.] *Appl.* bordering structure near margin

**submaxilla** (sŏb māk'sīl ā) *n.* [*L. sub* under *maxilla* jaw] Mandible

**submaxillary** (sŏb māk'sīl'ār) *n.* [*L. sub* under *maxilla* jaw] *Appl.* duct ganglion, gland triangle beneath lower jaw

**submedian** (sŏbmēd'īn) *n.* [*L. sub* under *medius* middle] *Appl.* tooth vein next median.

**submental** (sŏbmēn'tāl) *n.* [*L. sub* under *mentum* chin] Beneath chin *Appl.* artery glands, triangle vibrissae *part* submentum.

**submentum** (sŏbmēn'tām) *n.* [*L. sub* under *mentum* chin.] Basal part of labrum of insects.

**submersed** (sŏbmērs'd) *n.* [*L. sub-* *merger* to submerge] *Appl.* plants grown entirely under water

submicron (sübmi'kron) *n.* [*L. sub* under *Gk. mikros* small.] A particle seen as a separate disc only with aid of ultramicroscope of amicon.

submucosa (süb mükö'sä) *n.* [*L. sub* under *mucosa* mucous.] Layer of tissue under mucous membrane.

subnasal (süb näl'säl) [*L. sub* under *nasus* nose.] Beneath the nose.

subneural (süb nöl'säl) *a.* [*L. sub* under *Gk. neuron*, nerve.] *Appl.* blood vessel in annelids *appl.* gland and ganglion of nervous system of tunicates.

subnotochordal (süb nö'töör'däl) *a.* [*L. sub* under *Gk. notos* back *chorda* cord.] *Appl.* a rod, the hypochord ventral to notochord.

suboccipital (süb öksip'täl) *a.* [*L. sub* under *occiput* back of head.] *Appl.* muscles, nerve, triangle under occipitals of skull.

subocular shelf,—mgrowth from suborbitals supporting eyeball of fishes.

suboesophageal (süb ösöf'äl) *a.* [*L. sub* under *Gk. oesophagus* gullet.] Below the gullet suboesophageal.

subopercular (süb öpör'külar) *a.* [*L. sub* under *operculum* cover] Under operculum of fishes or shell-lid of molluscs.

suboperculum (süb öpör'küläm) *n.* [*L. sub* under *operculum*, cover] The subopercle, membrane bone of operculum of fishes.

suboptil (süb öp'tik) *a.* [*L. sub* under *Gk. optikos* relating to sight.] Below the eye.

suboral (süb ö'äl) *a.* [*L. sub* under *os* mouth.] Below or near mouth.

suborbital (süb örb'täl) *a.* [*L. sub* under; *orbis* circle.] *Appl.* structures below orbit.

subovate (süb ö'vät) *a.* [*L. sub* under *ovum* egg] S boval

subovoid somewhat oval or egg shaped.

subpalmate (süb pä'l'mät) *a.* [*L. sub* under *palmis* palm.] Tending to become palmate *appl.* leaves.

subparietal (süb päri'täl) *a.* [*L. sub* under; *paries* wall.] Beneath parietals *appl.* sulcus which is lower boundary of parietal lobe.

subpectinate (süb pëk'tinät) *a.* [*L. sub* under *pectus* comb.] Tending to be comb-like in structure.

subpedunculat (süb pëdün'külat) *a.* [*L. sub* under *L. pedunculus* little foot.] Resting on very short stalk.

subpericardial (süb përikär'däl) *a.* [*L. sub* under *Gk. peri* round *cardia* heart.] Under pericardium.

subperitoneal (süb përtion'eäl) *a.* [*L. sub* under *Gk. peritonaeum* something stretched round.] *Appl.* connective tissue under peritonaeum.

subpetiolar (süb pëtiölär) *a.* [*L. sub* under *petiolus* little foot.] With petiole or leaf-stalk.

subpetiolate (süb pëtiölät) *a.* [*L. sub* under *petiolus* small foot.] Almost sessile.

subpharyngeal (süb färin'jäl) *a.* [*L. sub* under *Gk. pharynx* pharynx.] Below the throat.

subphrenic (süb frën'ik) *a.* [*L. sub* under *Gk. phren*, midriff.] Below the diaphragm.

subplal (süb pläl) *a.* [*L. sub* under *plax*, kind.] Under the plate.

subplal (süb pläl) *a.* [*L. sub* under *Gk. plax*, side.] Beneath inner lining of thoracic wall.

subpubi (süb pü'bik) *a.* [*L. sub* under *pubis* adult.] Below the pubic region *appl.* aruate ligament.

subpulmonary (süb pül'mönär) *a.* [*L. sub* under *pulmo* lung] Beneath the lungs.

subradius (süb rä'diüs) *a.* [*L. sub* under *radius* ray] In radiate animals, radius of fourth order that between adradius and peradius, or between adradius and interadius.

subradular (süb rä'dülär) *a.* [*L. sub* under *radere* to scrape.] *Appl.* organ containing nerve endings situated at anterior end of odontophore.



- subramose (sûbrâ'môz) *n* [L. *sub* under *ramen* branch.] Slightly branching
- subreniform (sûbrên'îfôrm) *n* [L. *sub* under *renes* kidneys *forma* shape.] Slightly kidney shaped
- subretinal (sûbrê'tînål) *n* [L. *sub* under *retina* net.] Beneath retina.
- subrostral (sûbrô's'trål) *n* [L. *sub* under *rostrum* beak.] Below the beak or rostrum *appl* a cerebral fissure
- subsacral (sûbsâ'krål) *n* [L. *sub* under *sacrum* sacred] Below the sacrum.
- subsartorial (sûb sârt'siål) *n* [L. *sub* under *sartor* tailor] *Appl* plexus under sartorius of thigh
- subscapular (sûbsâ'p'ulâr) *n* [L. *sub* under *scapula* shoulder blade.] Beneath the scapula *appl* artery muscles, nerves etc.
- subscleoti (sûb sklerô'tîk) *n* [L. *sub* under Gk *skler* hard] Beneath sclera between sclerotic and choroid layers of eye
- subcutal (sûbsk'utål) *n* [L. *sub* under *cutis* hide.] Under scutum *appl* epibial gland of Gêns' organ, *g* mucks.
- subser (sûb ?) *n* [L. *sub* under *serre* to put *row*] Plant succession on denuded area secondary succession
- subseus (sûbsê'rus) *n* [L. *sub* under *seus* whey] Beneath serous membrane *appl* renal tissue.
- subserat (sûbsê'rât) *n* [L. *sub* under *serre* saw] Somewhat notched or saw-toothed.
- subsessile (sûbsê'sîl) *n* [L. *sub* under *sessis* to sit] Nearly sessile with almost no stalk.
- subsidiary *lla*,—additional modified epidermal cells lying outside guard-cell
- subspatulate (sûbspâ't'ulât) *n* [L. *sub* under *spatula* spoon.] Somewhat spoon-shaped
- subspinosus (sûbspî'us) *n* [L. *sub*

- under *spine* spine.] Tending to become spiny
- substantia (sûbstân'shâ) *n* [L. *substantia* substance.] Substance matter
- substantia adamantina, burnea, osses, — enamel dentine and cement of teeth, respectively
- substantia gelatinosa, —gelatinous neuroglia, with some nerve cells, in spinal cord.
- substantia nigra, —a semilunar layer of grey cells of mid brain.
- substantia reticularis, —anterior and lateral reticular formations in medulla oblongata.
- substantia spongiosa, —cancellous tissue of bone
- substantive variation, —changes in actual constitution or substance of parts of mensic variation.
- subternal (sûbsê't'nål) *n* [L. *sub* under *sternum* breast bone] Below the sternum.
- subtomatal, —hypostomatic
- subtrat (sûbstrât) *n* [L. *sub* under *stratum* layer] The substance upon which an enzyme acts, xymolyte a substance undergoing oxidation utilized in plant respiration, respiratory subtrat substratum.
- substratose (sûbsûrâ'tôz) *n* [L. *sub* under *stratum* layer] Slightly or indistinctly stratified.
- substratum (sûbsûtrâ'tôm) *n* [L. *sub* under *stratum* layer] The base to which stationary animal or a plant is fixed next substance containing or receiving nutrient solution substrate
- subtectal (sûbsêk'tål) *n* [L. *sub* under *tectum* roof] Pert all-sphenoid fish skull.
- subterminal (sûbsê't'mînål) *n* [L. *sub* under *terminus* covering] Under the tegmen or next coat of a seed.
- subtentisalar canals, —two prolongations of echinoderm coelom.
- subthalamus, lypothalamus *g* part of hypothalamus excluding optic chiasma and region of mammillary bodies

- subthoracic (suh'thōrēk'ik) *a.* [L. *sub* under Gk. *thōra* breast.] Not so far forward as to be called thoracic *appl.* certain fish-fins.
- subtrapezoidal (suh'trāpēzōid'al) *a.* [L. *sub*, under Gk. *trapezion* small table *eidos* form.] Somewhat trapezoid-shaped.
- subtruncate (suh'trūng'kāt) *a.* [L. *sub* under *truncatus* maimed] Terminating rather abruptly
- s* subtypical (suh'tip'ikāl) [L. *sub* under *typus* image.] Deviating slightly from type.
- subulate (suh'būlāt) *a.* [L. *subula*, wl.] Awl-shaped narrow and tapering from base to a fine point *appl.* leaves, as of onion.
- subumbellate (suh'būm'bēlāt) *a.* [L. *sub* under *umbella* small shade.] Tending to an umbel-like arrangement with peduncles arising from common centre.
- subumbonal (suh'būm'bōnāl) *a.* [L. *sub* under *umbra* boys.] Beneath or anterior to umbo of bivalve shell.
- subumbrella (suh'būm'brel'ā) *a.* [L. *sub* under *umbra*, shade.] Concave inner surface of medusoid bell.
- subuncinate (suh'būn'sināt) *a.* [L. *sub* under *uncus* hook.] Having somewhat hooked process somewhat hook-shaped.
- subungual (suh'būng'gwāl) *a.* [L. *sub* under *unguis* nail.] Under nail, claw or hoof hyponychial.
- subungula (suh'būng'gwā) *a.* [L. *sub* under *unguis* nail.] The ventral scale of a claw.
- subvaginal (suh'būv'jīnāl) *a.* [L. *sub* under; *vagina*, sheath.] Within or under sheath.
- subvertebral (suh'bēr'ēbrāl) *a.* [L. *sub* under *vertebra*, turning joint.] Under the spinal column.
- subzonal (suh'bēt'sīāl) *a.* [L. *sub* under *zona*, belt.] *Appl.* layer of cells internal to zona radiata.
- abyssomatic (suh'gūmāt'ik) *a.* [L. *sub* under Gk. *byssos* yoke.] Under the cheek-bone.
- succession (suh'sēsh'ūn) *n.* [L. *successio* succession.] A geological

- ecological or seasonal sequence of species; the development of plant communities chronological distribution of organisms in a given area lagging of sex-chromosomes behind euchromosomes in moving to the poles after meiosis
- s* celliferous (suh'sēl'fērūs) *a.* [L. *succus* sap *ferre* to carry] Sap-conveying
- s* celp t (suh'sēpt) *n.* [L. *sub* under *caput* head.] Area below of raven of neck in insects.
- succio (suh'sē) *a.* [L. *succinus* lopped off.] Abrupt appearing as if a part were cut off
- succubous (suh'kūbūs) *a.* [L. *sub* under *cadere* to lie down.] With each leaf covering part of that under it.
- succulent (suh'sūlēt) *a.* [L. *succus* sap.] Full of juice or sap.
- s* cū (suh'sū) *a.* [L. *succus* juice sap.] The juice of a plant fluid secreted by glands.
- sucker (suh'skēr) *n.* [A.S. *succan* to suck.] A stem-branch first subterranean and then aerial which may ultimately form an independent plant hamistocum, *g.s.* an organ adapted for creating vacuum, in some animals for purposes of ingestion others to assist in locomotion or attachment.
- s* cking disc.—a disc assisting in attachment, as at end of echinoderm tube-foot.
- s* crose (suh'krōs) *n.* [F. *sucres* sugar] Cane sugar  $C_{12}H_{22}O_{11}$
- s* ctorial (suh'skōr'īāl) *a.* [L. *succus* to suck.] Adapted for sucking; furnished with suckers *appl.* a pad of fat in relation with buccinator supposed to assist in sucking
- suder (suh'sūr) *a.* [L. *suder* sweat.] Perspiration.
- sudoriferous (suh'sūl'fērūs) *a.* [L. *suder* sweat *ferre* to carry] Conveying producing or secreting sweat *appl.* glands and their ducts.
- sufflaminar (suh'flāmīnāl) *a.* [L. *sufflamen*, blast.] *Appl.* plate partly forming gill-chamber in certain extinct fishes.

**suffrutex** (suf'root'eks) *n* [*L. sub* under *frutex* shrub.] An under shrub

**suffruticosa** (suf'root'ikōs) *a* [*L. sub* under *frutex* shrub] Somewhat shrubby

**sugent** (sūj'ent) **sugescent** (sūj'et-ent) *a* [*L. sugere* to suck.] Suctorial.

**sulcate** (sūl'kāt) *a* [*L. sulcus* furrow] Furrowed grooved.

**sulcation** (sūl'kāt shūn) *n* [*L. sulcatus* ploughing] Fluting formation of ridges and furrows, as in elytra

**sulcus** (sūl'kūs) *n* [*L. sulcus* furrow] A groove *appl* cerebral grooves those of heart, tongue, cornea, bones etc. stomodaeal groove of *Anthozoa* longitudinal flagellum groove of *Dinoflagellata* leucos.

**summation** (sūmā shūn) *n* [*summare* sum total.] Combined action of either simultaneous or successive subliminal stimuli or impulses which produces an excitatory or inhibitory response

**summer egg**—thin-shelled quickly developing egg of some fresh-water forms, laid in spring or summer of winter egg

**supercarpal** (sūp'ē kār pāl soo-) *a* [*L. super* over *carpus* wrist.] Upper carpal or above the carpus.

**supra cilla** (sūp'rā'illā, soo-) *n plm* [*L. supercilium* eyebrows] The eye brows.

**superciliary** (sūp'rā'illārī soo-) *a* [*L. super* over *cilium* eyelids] *Pert* eyebrows above orbit.

**superciliary arches**,—two arched elevations below frontal eminences.

**superficial** (sūp'rē'fīsh āl soo-) *a* [*L. super* over *facies* face] On or near the surface *appl* arteries veins etc

**superfornatus** (sūp'rē'fōrtā shūn) *n* [*L. for* over *foratus* big with.] Fertilization of ovum in more than one kind of pollen but cause fertilization of 1 ovum of different outcrossing parents the same uterus perforation hypercytus

**supra glottal** (sūp'rē glōt āl soo-)

[*L. super* over *Gk. glōtis* tongue] Above the glottis.

**superior** (sūp'rē'riō soo-) *a* [*L. superius* upper] Upper higher growing or arising above another organ anterior

**sup rilinguae** (sūp'rē'ling'gwē soo-) *n plm* [*L. super* over *lingua* tongue.] Paired lobes of hypopharynx in certain insects.

**superparasit**, —hyperparasite *g.p.*

**supersacral** (sūp'rēnt'krāl soo-) *a* [*L. super* over *sacrum* sacred.] Above the sacrum.

**supersonal** (sūp'rēnt'āl, soo-) *a* [*L. super* over *sonus* is sound.] *Appl* sounds of high frequency inaudible by human ear as emitted by certain animals.

**supersphenoidal** (sūp'rēnt'sfēnōid āl, soo-) *a* [*L. super* over *Gk. sphenon* wedge *cilia* form.] Above sphenoid bone

**supervolute** (sūp'rēvōlūt soo-) *a* [*L. super* over *volvere* to roll.] Having a plaited and rolled arrangement = the bud.

**supinate** (sūp'īnāt) *a* [*L. supinus* bent backwards] Inclining or leaning backwards.

**supination** (sūp'īnāt shūn) *n* [*L. supinus* bent backward] Movement of arm by which palm of hand is turned upwards of pronation

**supinator brevis and longus**,—two arm muscles used in supination.

**supra mental air**—volume of air which can be expelled from the lungs after normal breathing out reserve air

**supplementary type** 1 type *g.p.*

**supra sason** (sūp'rā'sōn) *n* [*L. super* from *sub* under *pressus* pressed] Non development of an organ part

**supra-acromial** (sūp'rā'āk'rōmīāl, soo-) *a* [*L. supra* above *Gk. akros* summit *omeros* shoulder] Above the acromion of the shoulder blade

**supra-anal** (sūp'rā'ānāl soo-) [*L. supra* above *anus* anus] *So* anal box anus or anal region

supra angular — surangular *q.v.*  
 supra-auricular (sū prā-ōrīk'ūlā soo-) *a.* [*L. supra*, above *auris* ear] Above the auricle or ear; *appl.* feathers.  
 supra-brachial (sū prābrāng'kiāl, soo-) *a.* [*L. supra* above *brachia* gills.] Above the gills.  
 suprabuccal (sū prābūk'āl soo-) *a.* [*L. supra*, above *bucca*, cheek] Above cheek and mouth.  
 supracallioal (sū prākālō'āl, soo-) *a.* [*L. supra*, above *callus* hard.] *Appl.* gyrus on upper surface of corpus callosum of brain.  
 supracaudal (sū prākōd'āl soo-) *a.* [*L. supra*, above *cauda*, tail.] Above the tail or caudal region.  
 supracellular (sū prākū'ūlār soo-) *a.* [*L. supra*, above *cellula*, small cell.] *Appl.* structures, fibrous or laminae originating from many cells.  
 supracerebral (sūprākē'ebāl) *a.* [*L. supra*, above *cerebrum* brain.] *Appl.* lateral pharyngeal glands, as in Hymenoptera.  
 suprachoroid (sū prākō roid, soo-) *a.* [*L. supra*, above *Gk. chorion*, skin.] Over the choroid between choroid and sclera *appl.* lamina suprachoroid.  
 supraclavial (sū prākīā 'īāl, soo-) *a.* [*L. supra*, above *clavicula*, small key] Supracleithrum, bone of shoulder girdle of fishes.  
 supraclavicular (sū prākīāvīk'ūlār soo-) *a.* [*L. supra* above *clavicula*, small key] Above or over the clavicle *appl.* nerves.  
 supracleithrum (sū prākī'īthrum, soo-) *a.* [*L. supra*, above *Gk. cleithron* key] Supraclavicle.  
 supracondylar (sūprākōn dīlār soo-) *a.* [*L. supra*, above *Gk. condylus* knob.] Above a condyle *appl.* ridge and process.  
 supracostal (sūprākōs'tāl soo-) *a.* [*L. supra*, above; *costa*, rib.] Over or externally to the ribs.  
 supracranial (sūprākīn nīāl soo-) *a.* [*L. supra*, above *Gk. cranium* skull.] Over or above the skull.  
 supradorsal (sū prādōr sāl, soo-) *a.*

[*L. supra* above *dorsum* back.] On or over the back *appl.* small cartilaginous elements in connection with primitive vertebral column.  
 supra-ethmoid (sū prā-ēth moid, soo-) *n.* [*L. supra* above *Gk. ethmos* sieve *oides* form.] Dermethmoid bone external to mesethmoid.  
 supraglenoid (sū prāgīn'oid, soo-) *a.* [*L. supra*, above *Gk. glenae* socket.] Above the glenoid cavity *appl.* tuberosity at apex of glenoid cavity.  
 suprahyoid (sūprāhī'oid, soo-) *a.* [*L. supra*, above *Gk. hyoides* T shaped.] Over the hyoid bone *appl.* pectorous glands, muscles.  
 prelabial (sūprālā'bīāl soo-) *a.* [*L. supra*, above *labium* lip] On the lip *appl.* scutes or scales.  
 upralateral (sūprālāt'ōrāl, soo-) *a.* [*L. supra* above *latus* seashore.] *Part.* seashore above high water mark or spray zone supralateral.  
 supraloral (sū prālōr'āl, soo-) *a.* [*L. supra*, above *lorum* thong] Above the loral region, as in birds, snakes.  
 supramastoid crest,—ridge at upper boundary of mastoid region of temporal bone temporal line.  
 premaxillary (sūprāmākīl'ārī soo-) *a.* [*L. supra*, above *maxilla*, jaw] *Part.* upper jaw.  
 supramental (sūprīmēntāl soo-) *a.* [*L. supra*, above *mentis* passage.] *Appl.* triangle and spine over external acoustic meatus.  
 supranasal (sū prān sāl soo-) *a.* [*L. supra*, above *nasus* nose.] Over nasal bone or nose.  
 praoccipital (sūprākōp'tīāl, soo-) *n.* [*L. supra*, above *occiput* back of head.] A large median bone of upper occipital region.  
 supraocular (sūprākō'ūlār soo-) *a.* [*L. supra*, above *oculus* eye.] Over or above the eye *appl.* scales.  
 supraoesophageal (sūprāōsōfāj'āl soo-) *a.* [*L. supra*, above *Gk. oesophagus* gullet.] Above or over the gullet *supraesophageal*.

**supraorbital** (sū prāōr'bītal soo-) *n*  
[*L. supra* above *orbit* circle.]  
Above orbital cavities *appl* pro-  
cess artery foramen, nerve vein  
etc. *n*. A skull bone in certain  
fishes

**suprapharyngeal** (sū prāfari'njēal  
soo-) *n*. [*L. supra* above *Gk. pharynx* pharynx.] Above or over  
pharynx.

**suprapubic** (sū pēpū'bīk, soo-) *n*  
[*L. supra* above *pubes* adult.]  
Above the pubic bone.

**suprapygial** (sū prāpī'gīal soo-) *n*.  
[*L. supra* above *Gk. pyge* rump.]  
Above the pygal bone

**suprarenal** (sū prārē'nāl soo-) *n*.  
[*L. supra* above *renes* kidneys.]  
Situated above kidneys adrenal  
*appl* *renes*, glands veins plexus.

**suprarenal bodies** capsules, or  
glands,—paired endocrine glands  
situate near or apposed to, kidneys  
of vertebrates adrenals.

**suprar nin** (sū prārē'nīn) *n* [*L. supra* above *renes* kidneys.]  
Synthetic adrenaline

**suprarostral** (sū prārō'strāl, soo-) *n*.  
[*L. supra* above *rostrum*  
beak.] *Appl* a cartilaginous plate  
anterior to trabeculae in Am-  
phibia.

**suprascapula** (sū prāskāp ūla, soo-)  
*n* [*L. supra* above *scapula*  
shoulder blade] A cartilage of  
dorsal part of pectoral girdle in  
rays an incompletely ossified  
extension of scapula of amphibians  
and certain reptiles.

**suprascapular** (sū prāskāp ūlār soo-)  
*n*. [*L. supra* above *scapula*  
shoulder blade] Above the  
shoulder-blade *appl* artery liga-  
ment nerve

**suprasseptal** (sū prāsēp'tāl soo-) *n*  
[*L. supra* above *septum* parti-  
tion.] *Appl* to plates diverging  
from interorbital septum

**suprasphenoid** (sū prāsēfē noid soo-)  
*n* [*L. supra* above *Gk. sphen*  
wedge] Membrane bone dorsal to  
sphenoid cartilage.

**suprasphenoidal** (sū prāsēfēnoid'al  
soo-) *n* [*L. supra* above *Gk.*

*sphen* wedge.] Above sphenoid  
bone of skull.

**supraspinal** (sū prāspī'nāl, soo-) *n*.  
[*L. supra* above *sphen* spine.]  
Above or over spinal column *appl*.  
a ligament above ventral nerve  
cord, in insects *appl*. a cord of  
connective tissue and pulsating  
vessel

**supraspinatus** (sū prāspīnāt'ūs  
soo-) *n*. [*L. supra* above *spina*  
pine.] *Appl* scapular fossa and  
fascia for origin of supraspinatus.

**supraspinatus**,—shoulder muscle in-  
serted into proximal part of greater  
tubercle of humerus.

**suprastapedial** (sū prāstāpē dīāl  
soo-) *n* [*L. supra*, above *stapes*  
stirrup.] The part of columella of  
ear above stapes, homologous with  
mammalian malleus.

**suprasternal** (sū prāstēr'nāl, soo-) *n*.  
[*L. supra* above *sternum* breast  
bone.] Over or above breast  
bone *appl* a slit-like space in cervical  
muscle *appl* supernumerary ster-  
nal elements in some mammals  
*appl* body-plane.

**suprastigmal** (sū prāstīg'māl soo-)  
*n*. [*L. supra* above *stigma* mark.]  
Above stigma or breathing-pore  
of insects

**supratemporal** (sū prātēm pōrāl,  
soo-) *n* [*L. supra* above *tem*  
*pore* temples.] Part upper tem-  
poral region of skull *appl* bone  
arch, fovea.

**suprathoraci** (sū prāthōrāk'īk, soo-)  
*n* [*L. supra* above *Gk. thorax*  
breast.] Above thoracic region.

**supratidal** (sū prātīd'al) *n* [*L. supra*  
above *A.S. tid* time] Above  
high-tide mark *appl* pray one  
or more organisms living there.

**supratonillar** (sū prātōn ūlār soo-)  
*n*. [*L. supra* above *tonillus*  
tonus] *Appl* a small depression  
in lymphoid mass of palatine  
tonsil.

**supratrochlear** (sū prātōrōk'īlār soo-)  
*n* [*L. supra* above *Gk. trochlea*  
pulley] Over trochlear surface;  
*appl* nerve foramen lymph  
glands.

**supratympani** (sū pēitimpān'ik soo-) *n.* [L. *supra* above (*synonym* drum.) Above the eardrum.

**sural** (sū rāl) *n.* [L. *sura*, calf of leg] *Part.* calf of leg; *appl.* arteries and nerves.

**suranal**,—supra-anal, *q.v.*

**surangular** (sūrāng'gūlar) *n.* [L. *supra* above *angulus* angle.] Supra-angular a bone of lower jaw of some fishes, reptiles, and birds.

**suculose** (sūr'kūlōs) *n.* [L. *succus* shoot.] Succulose succuligerous *appl.* plants producing suckers first underground, thence aerial and forming independent plants bearing suckers stoloniferous.

**suculus** (sūr'kūlūs) [L. *succulus* shoot.] Underground shoot, ultimately aerial and independent sucker.

**suprenal**,—suprarenal.

**suscept** (sūr'sēpt) [L. *suscepere* to undergo.] A plant or animal susceptible to disease species harbouring virus.

**suspensor** (sūspēnsō) *n.* [L. *suspendere* to hang down.] A chain of cells developed from hypobasal segment of angiosperm zygote, attaching embryo to embryo sac occurring in modified form in other plants terminal filament of ovule.

**suspensorium** (sūspēnsō'rīum) *n.* [L. *suspendere* to hang down.] The upper part of hyoid arch from which lower jaw is suspended suspensory structure of hypopharynx the skeletal support of gonopodium.

**suspensory** (sūspēnsōrī) *n.* [L. *suspendere*, to hang down.] *Part.* suspensorium serving for suspension *appl.* various ligaments.

**sustentacular** (sūstēntāk'ūlār) *n.* [L. *sustentare* to support.] *E* supporting *appl.* connective tissue acting as a supporting framework for an organ *appl.* cells fibres.

**sustentaculum** lī nīa, —fold of peritoneum supporting spleen.

**osteotaculum** tali, —projection of calcaneus supporting middle articular surface for ankle bone.

**sustator** (sūstētātōr) *n.* [L. *sustinere* to sustain.] Sustentor or hooked cremaster of Lepidoptera.

**sutural** (sū'tūrāl soo-) *n.* [L. *sutura*, seam] *Part.* suture *appl.* dehiscence taking place at suture.

**sutural bones**, —irregular isolated bones occurring in the course of sutures especially in lambdoidal suture and posterior fontanelle ossa suturarum Wormian bones.

**suture** (sū'tūr soo-) *n.* [L. *sutura* seam.] Line of junction of two parts immovably connected line of union of shell-wall and edge of septum, as in ammonites line of junction between sclerites an immovable articulation of bone as in skull dehiscence line.

**Swammerdam glands** [/ Swammerdam, Dutch naturalist]. Periganglionic glands, *q.v.*

**Swammerdam's vesicle**, —the spermatheca of gastropods.

**swarm** (swārm) *n.* [A.S. *swarmen*, swarm.] A large number of small motile organisms viewed collectively departure of number of bees from one hive to form another.

**swarm spore**, —zoospore, *q.v.*

**swimmerets**, —paired abdominal appendages of crustaceans, functional partly for swimming.

**swimming bells**, —octocalyces of siphonophores, serving to propel the colony.

**swimming or swim bladder** —air bladder of fishes, developed as diverticulum of the alimentary canal.

**swimming funnel**, —tube of Dibranchiata through which water is expelled from mantle cavity expulsion providing means of propulsion.

**swimming ovaries**, —groups of ripe ova of Acanthocephala, detached from ovary and floating in body cavity.

swimming plat *s.*—in Ctenophora, eight equidistant bands of ciliated comb-like plates or comb-ribs propellers of the organism.

syconium (síkō nŭm) *n* [Gk. *sykon* fig] A syconus a composite succulent, receptacula frust.

syva (sŭ'vā) *n* [L. *syva* forest] Forest of a region forest-trees collectively

sylvian (sŭ'vīān) *n* [F. *Sylvius* o *de la Rue* French anatomist] *Appl* structures described by Sylvius as aqueduct (*q.s.*) fissure (lateral cerebral fissure) *forma* *vefus* etc.

symbiont (sŭm'bŭōnt) *n* [Gk. *syn* with *biōn* to live.] One of the partners in symbiosis symbion.

symbiosis (sŭmbŭōsis) *n* [Gk. *syn* *biōn* : live together] A condition in which two animals two plants, or plant and animal symbiotes or symbionts, live in mutually beneficial partnership the living together of organisms belonging to more than one species

symbiote—symbiont *q.s.*

symbiotic (sŭmbŭōt'ik) *a* [Gk. *syn* *biōn* to live together] Living in beneficial partnership living together whether in actual contact not, with mutual benefit or antagonism.

symmetrical (sŭm'ētr'ikāl) *a* [Gk. *syn* with *metron* measure] Regularly shaped divisible : exactly similar part

symmetry (sŭm'ētrī) *n* [Gk. *syn* with *metron* measure.] State of divisibility into similar halves regularity of form similarity of structure on each side of an axis central dorsoventral or antero-posterior. *See* bilateral and radial symmetry

sympathetic (sŭmpāthēt'ik) *a* [Gk. *syn* with *pathos* feeling] *Appl* system of nerves supply g viscera and blood vessel and intimately connected with pinal and some cerebral nerves *Appl* segmental nerves supply g paracles in in

sects *Appl* coloration in imitation of surroundings.

sympathin (sŭm'pāthin) *n* [Gk. *syn* with *pathos* feeling] Substance yielded by sympathetic nerves and having physiological properties of adrenaline.

sympathoblast (sŭm'pāthōblāst) *n* [Gk. *syn* with *pathos* feeling *blastos* bud.] A cell which develops into a neurone of sympathetic ganglia.

sympathomimetic (sŭm'pāthōmīmēt'ik) *a* [Gk. *syn* with *pathos* feeling *mimētikos* imitating] *Appl* substances which produce effects like those produced by sympathetic stimulation.

sympatric (sŭmpāt'rik) *a* [Gk. *syn* with *patris* native land.] Having the same or overlapping areas of geographical distribution. *Opp* allopatric

sympetalous (sŭmpēt'ālds) *a* [Gk. *syn* with *petalon* leaf] Having a tubular corolla formed by union of petals gamopetalous.

sympathy (sŭm'filī) *n* [Gk. *syn* with *philein* to love] Commensalism, of symphiles with mutual liking

symploresis (sŭm'fōr'ēsīs) *n* [Gk. *syn* with *pherein* to bear] Co-veyance collectively as movement of spermated group to Sertoli cell

symplyanthous — synantheros, *q.s.*

symplylloides (sŭm'filō'diōm) *n* [Gk. *syn* with *phylon* leaf *eidos* form] A structure formed by coalescence of external coats of two or more ovules compound oval ferous scale

symplyll us,—gamophyllous *q.s.*

symplyogenosis (sŭm'fōj'ēsīs) *n* [Gk. *syn* *phlyein* to grow together *genesis* descent] Development of an organ from union of two others

symplysal (sŭm'fīz'āl) *a* [Gk. *syn* *phlyus* a g owing together] Symphyseal symphyseal *part* symphyseal

**symphysal** (sím'fízis) *n.* [Gk. *sym-physis* 'growing together'] The confluence of parts the line of junction of two pieces of bone separate in early life as pubic symphysals slightly movable articulation with bony surfaces connected by fibrocartilage.

**symplast** (sím plást) *n.* [Gk. *syn* with *plastos* formed.] Multi-nucleate body formed by nuclear fragmentation of a single energid coenocyte, *q.v.*

**symplastic** (símplíst'ík) *a.* [Gk. *symplassai* 'to mould together'] Being formed with co-ordinated development of parts *appl* growth of contiguous cells without displacement f cell-walls.

**symplectic** (símplékt'ík) *n.* [Gk. *symplectes* plaited.] A bone of fish skull between quadrate and hyomandibular.

**symples** (sím plés) *n.* [Gk. *symplectes* plaited.] The combination of the active substance and proto-plasmic protein which constitutes an enzyme of agon, pheron.

**sympodial** (símptó'díál) *a.* [Gk. *syn* with *pus* foot.] *Pus* or resembling sympodium in principle *appl* branching growth of axillary shoots when apical budding has ceased.

**sympodite** (sím podít) [Gk. *syn* with *pus* foot.] The protopodite of Crustacea.

**sympodium** (símptó'díám) *n.* [Gk. *syn*, with *pus*, foot.] A primary axis consisting of line connecting bases of consecutive branchings.

**synacme** (sínák mē) *n.* [Gk. *syn* with *akros* prime.] Condition when stamens and pistils mature simultaneously *ynanthesis* *synacmy*

**synaesthesia** (sínēstēzi'stē) *n.* [Gk. *syn*, with *aisthēsis* sensation.] The accompaniment of a sensation due to stimulation of the appropriate recepto as sound, by a sensation characteristic of another sense as colour

**synangium** (sínán'jóm) *n.* [Gk. *syn* with *angos* vessel.] A compound sporangium in which sporangia are coherent, as in some ferns anterior portion of trunco arteriosus.

**synantherous** (sínán thērūs) *a.* [Gk. *syn* with *antheros* flowery] Having anthers united to form tube.

**ynanthesis**,—*synacme*, *q*

**synanthou** (sínán'thūs) *a.* [Gk. *syn* with *anthes* flower] Having flowers and leaves appearing simultaneously having flowers united together

**synanthy** (sínán'thē) *n.* [Gk. *syn*, with *anthes* flower] Adhesion f flowers usually separate.

**synasporium** (sínápō ríám) *n.* [Gk. *syn*, with; *sporis*, want.] An animal association formed owing to unfavourable environmental conditions or disease.

**synposematē** (sínápōetēmā'tē) *a.* [Gk. *syn*, with *epō* from *sema* sign.] Having warning colours in common *appl* mimicry of more powerful species as means of defence.

**synapse** (sínápsē) *n.* [Gk. *synapsis* union.] The connection of one nerve cell and another through the medium of terminal branchings of dendrons or axons the area f contiguity between two nerve cells of ephapse.

**synapsid** (sínáp síd) *a.* [Gk. *synapsis* union.] *Appl* skulls with supra- and infra-temporal forams united in single foras.

**synapsis** (sínáp sīs) *n.* [Gk. *synapsis* union.] Stage or period from contraction of nucleus to segmentation of spireme into chromosomes; *syndesis*, *q.v.* *synapse* *q.v.*

**synaptene** (sínáptēn) *n.* [Gk. *synapsis* union *tenis*, band.] *Appl* sygotene stage in meiosis *synaptotene*.

**synapti membrana**,—a membrane intervening between nerve-ending and muscle fibre supplied by it, also between processes of one neurone and those of another



**synapticula** (sínáp'tík'úla) = [Gk. *synapsis* united.] One of small rods connecting septa of mushroom coral or like structure.

**synaptospermous** (sínáp'tospér mós) = [Gk. *synapsis* joined *sperma* seed.] Having seeds germinating close to the parent plant.

**synptychus** (sínáp'tík'ós) = [Gk. *syn* with *ptychē* together *plate* plate.] Aptychus in which paired plates are permanently united.

**synarthrosis** (sín árthrós'is) = [Gk. *syn* with *arthron* joint.] An articulation in which bone surfaces are in almost direct contact, fastened together by connective tissue or hyaline cartilage with no appreciable motion.

**synascus** (sínás'kós) = [Gk. *syn* together *asco* bag.] An ascogonium containing number of asci.

**syn-carp** (sín'kárp) = [Gk. *syn* with *carpe* fruit.] A syncarpium an aggregate fruit with united carpels.

**syncarpous** (sínkár'pús) = [Gk. *syn* with *carpe* fruit.] Bearing a collective fruit with carpels united.

**syncarpy** (sínkár'pí) = [Gk. *syn* with *carpe* fruit.] Condition of having carpels united to form compound ovary.

**syncerebrum** (sínstr'ébrum) = [Gk. *syn* with *L. cerebrum* brain.] A secondary brain formed by union with brain of one or more of ventral cord ganglia in some arthropods.

**synchisma** (sínkímád'is) = *plu* [Gk. *syn* with *Arctemisia* winter daisy.] Societies overwintering together.

**synchondrosia** (sín'kóndrós'is) = [Gk. *syn* with *chondros* cartilage.] A synarthrosis in which the connecting medium is cartilage.

**synchology** (sín kól'ój) = [Gk. *syn* with *choros* place *logos* discourse.] Study of the distribution of plant or animal societies geographical distribution of communities.

**synchronic** (sínkrón'ik) = [Gk. *syn* with *chronos* time.] Contemporary existing at the same time *App* species etc. *App* allochronic.

**synconium** (sínkón'íum) = [Gk. *syn* with *conus* cone.] Hollow inflorescence axis of fig *syconium*.

*syn*

**synsplanate** (sínkrón'isít) = [Gk. *syn* with *synsplan* skull.] Having vertebral elements fused with skull.

**synsplanterian** (sínkrót'éríán) = [Gk. *syn* with *synsplan* wisdom teeth.] With teeth in a continuous row.

**syncretic** (sínkrép'tík) = [Gk. *syn* with *cryptos* hidden.] *App* animals alike, though unrelated, through common protective resemblance to surroundings.

**syncytiotroph blast**—**syncytium**.

**syncytium** (sínstít'íum) = [Gk. *syn* with *cytos* hollow.] A multinucleated mass of protoplasm without differentiation into cells outer stratum of trophoblast of mammalian ovum the syncytiotrophoblast; plasmodium coenocyte.

**syndactyl** (sín-dák'tíl) = [Gk. *syn* with *dactylus* digit.] With fused digits as in many birds.

**syndactylism** (sín-dák'tílitam) = [Gk. *syn* with *dactylus* digit.] Whole or part fusion of two or more digits.

**syndesis** (sín-dés'is) = [Gk. *syndesmo* binding together.] Conjunction or fusion of homologous chromosomes meiosis synapsis.

**syndesmology** (sín-dés'mól'ój) = [Gk. *syndesmo* ligament *logos* discourse.] The branch of anatomy dealing with ligaments and articulations.

**syndesmosis** (sín-dés'mós'is) = [Gk. *syndesmo* ligament.] A slightly movable articulation with bony surfaces connected by an interosseous ligament of symphysis.

**syndrom** (sín-dém) = [Gk. *syn* together *dromos* to run.] A group of concomitant symptoms.

**synecology** (sín'ekol'oj) *n* [Gk. *syn* together *oikos* household *logos* discourse.] Ecology of plant or of animal communities.

**synecthry** (sín'ek'thri) *n*. [Gk. *syn* with; *ekthra* hatred.] Commensalism of synecthrans with mutual dislike.

**synema** (sín'e'má) *n* [Gk. *syn* with *neme*, thread.] Synema, *q.v*

**syneresis** (sín'er'esis) *n* [Gk. *syn* together *eroido* to press.] Contraction of gel with expression of liquid contraction of clotting blood and separation of serum.

**synergic** (sín'er'jik) *a*. [Gk. *synergos* co-operator] Operating together synergistic *adj.* muscles which combine with prime movers and fixation muscles in movement *adj.* system of muscles and nerves affecting particular movement *adj.* certain hormones.

**synergid** (sín'er'jid) *n*. *sinergida* (sín'er'jidá) *pl.* [Gk. *synergos* co-operator.] Two help-cells lying beside ovum at micropylar end of embryo-sac of an ovule.

**syngamy** (sín'gámi) [Gk. *syn* with *gamos* marriage] Sexual reproduction fusion of gametes.

**syngenes us** (sín'jén'e'sús) *a*. [Gk. *syn*, with *gamos* descent.] Having stamens united in cylindrical form by anthers with anthers united.

**syngeneis** (sín'jén'esis) *n* [Gk. *syn* with; *genesis* descent.] Sexual reproduction theory that germs of all human beings, past present, and future, were created simultaneously and that there are germs within germs and *syngeneism* co-ancestry, *q.v*

**syngenetic** (sín'jén'etik) *a*. [Gk. *syn*, with *genesis* descent.] Sexually reproduced descended from the same ancestors.

**syngnathus** (sín'gúthá) *n. pl.* [Gk. *syn* with *gnathos* jaw] Paired jaws or mouth plates of Steller oids.

**syngon** (sín'gon'ik) *a*. [Gk. *syn* with *gonos* seed.] Producing

male and female gametes in the same gonad.

**syngynous**,—**episyngynous**, *q.v*

**synhesma** (sín'hés'má) *n*. [Gk. *syn* with *haima* swarm.] A swarm a swarming society

**synkinesis** (sín'kín'esis) *n* [Gk. *synsínesis* contraction.] The attraction-figure associated with syndesis contracted phase of nucleus during synapsis myosis or contraction of pupil.

**synkaryon** (sín'kár'ion) *n*. [Gk. *syn*, with *karyon*, nucleus.] Zygote nucleus resulting from fusion of pronuclei.

**synkaryophyte** (sín'kár'íofit) *n* [Gk. *syn* with *karyon*, nucleus *phylon*, plant] Diploid plant sporophyte.

**synsma** (sín'né'má) *n*. [Gk. *syn* with *neme*, thread.] Bundle column of fused thread-like structures as of conidiophores the united stamen filaments of monadelphous flower

**synochreate**, **synochreate** (sín'ók'rét) *a*. [Gk. *syn* with *L. acra*, legging] With stipules united enclosing stem in sheath.

**synoecious** (sín'í'ous) **synoecous** (sín'í'ous) *a*. [Gk. *syn* with *oikos* house.] Having antheridia and archegonia on same receptacle, or stamens and pistils on same flower or male and female flowers on same capitulum.

**synoekete** (sín'í'et) *n* [Gk. *syn* with *oikos* dweller] A tolerated guest in colony

**synosteals** (sín'osté'sh) *n* [Gk. *syn* with *osteon*, bone.] Ossification from two or more centres in the same bone, as from diaphyses and epiphyses in long bones anchylosis, *q.v*

**synosteals**,—**synostosis**.

**synot tectum**,—**synot tectum** in higher vertebrates, cartilaginous arch between otic capsules representing cartilaginous roof or tegmen of cranium in lower vertebrates.

**synovia** (sín'ó'vía) *n*. [Gk. *syn*, with *L. ovum*, egg] Viscid, glairy secretion of synovial membrane

**synovial m** membrane,—inner strat m of articular capsule connective tissue secreting lubricating fluid for joints.

**synoviparous** (sín'ovíp áriús) *n.* [Gk. *syn* with *L. ovum* egg *parere* to beget.] Secreting synovia.

**synlimous** (sínep'límús) *n.* [Gk. *syn* with *pelma*, sole.] Having two tendons united before they go to separate digits.

**synhydramic** (sín pólídés mfk, -déz) *n.* [Gk. *syn* with *poly* many *dramas* bond] *Appl* cyclomerial scales mad p f fused monodermic scales with continuous dentine layer.

**synsacrum** (sínás'krúm) *n.* [Gk. *syn* with *L. sacrum* sacred.] A mass of fused vertebrae supporting the pelvic girdle f birds.

**synsepalous** (sínép'séús) *n.* [Gk. *syn* with *F. sepal* sepal.] With calyx composed of fused united sepals.

**synspermous** (sínspér'mús) *n.* [Gk. *syn* with *semen*, seed.] Having several seeds united.

**synsporous** (sínspó'rús) *n.* [Gk. *syn* with *semen* seed.] Propagating by cell conjugation, as i algae.

**syntechnic** (sín'ték nfk) *n.* [Gk. *syn* with *techné* skill.] Resemblance in unrelated animals du to environment convergence.

**syntelome** (sín'tél'óm) *n.* [Gk. *syn* with *telos* end.] A compound telome.

**syntosis** (sín'tén'sis) *n.* [Gk. *syn* with *sinus* sinew] Tendinous articulation.

**syntrophoblast** (síntróf'óblist) *n.* [Gk. *syn* together *trophos* to nourish *blastos* bud] Trophoblastic yncytiom plasmoditrophoblast.

**syntropí** (síntróp'ík) *n.* [Gk. *syn* together *tropos* turn] Turning or arranged in the same direction as ribs on one side.

**syntype** (sín'típ) *n.* [Gk. *syn* with *types* pattern] Any one specimen of series used to designate species when holotype and para-

types have not been selected cotype.

**synusia** (sínú'siá) *n.* [Gk. *synusia*, living together] A plant community f relatively uniform composition living in particular environment and forming part of phytocoenosis, *q.v.*

**synzoospore** (sínzód'ópór) *n.* [Gk. *syn* with *semen* animal *spora* seed.] A group of zoospores which do not separate.

**syringeal** (sín'jéál) *n.* [Gk. *syrinx* pipe.] Pert to the syrinx.

**syringium** (sín'jím) *n.* [Gk. *syrinx* pipe.] A syringe like organ for ejection of disagreeable fluid of some insects.

**syringograde** (sín'jóg'grád) *n.* [Gk. *syrinx* pipe *L. gradus* step.] Jet-propelled, moving by alternate suction and ejection of water through siphons, as Salpa.

**syrinx** (sín'íngks) *n.* [Gk. *syrinx* pipe.] Vocal organ of birds, at base of trachea.

**systemic circulation**,—course of blood from left ventricle through the body to right atrium, *opp* pulmonary or lesser circulation.

**systemic heart**,—heart of invertebrates, and auricle and ventricle f left end of heart of higher vertebrates. *Opp* respiratory heart.

**syttill** *n.*—*syttillus* *q.v.*

**syttol** (sít'tól) *n.* [Gk. *syttale* drawing together] Contraction of heart causing circulation of blood contraction of any contractile cavity *Opp* diastole.

**syttrophe** (sít'tróff) *n.* [Gk. *syttrophos* gathering] An aggregation of starch grains in chloroplasts, induced by illumination.

**syttylus** (sít'tílús) [Gk. *syttos* with *styles* column] The columella lid f some mosses.

**syttulous** (sít'tíús) *n.* [Gk. *syttos* with *styles* column.] With coherent styles with fixed columella lid as mosses.

**syttigi** (sít'tígím) *n.* [Gk. *syttos* with *syttos* yoke.] Group of associated gregarines.

**SYZYGY** (sī'zī) *n.* [Gk. *syn* with; *zygon* yoke.] A close suture of two adjacent arms, found in crinoids number of individuals, two to five, adhering in strings in association of gregarines reunion of chromosome fragments at meiosis.

## T

**tables** (tā'bis) *n. pl.* [L. *tabula*, board.] Outer and inner layers of flat compact bones, especially of skull.

**tabula** (tā'būlā) *n.* *tabulae* (tā'būlā) *pl.* [L. *tabula*, table.] Horizontal partitions traversing vertical canals of Hydrocoellina and of tabulate corals.

**tabularia** (tā'būlārī) *n.* [L. *tabula*, table.] Skull bone posterior to parietal in some vertebrates.

**tachyauzeis** (tāk'tākt'sis) *n.* [Gk. *tachy* quick *auzeis* growth.] Relatively quick growth of part at faster rate than that of the whole *opp.* bradyauzeis.

**tachygenesi** (tāk'tjēn'ēsis) *n.* [Gk. *tachy* quick *genesis* descent.] Development with omission of certain embryonic stages, as in some crustaceans, or of nymphal stages, as in some insects accelerated development in phylogeny *opp.* bradygenesis.

**tachyporus** (tāk'tīp'ōrūs) *n.* [Gk. *tachy* quick *porus* seed.] Dispersing seeds quickly.

**tachytell** (tāk'tē'tīk) *n.* [Gk. *tachy* quick *tell* fulfillment.] Evolving at rate faster than the standard rate, *opp.* bradytell of horotelic.

**tacti** (tāk'tīk) *n.* [Gk. *tactis* arranged.] *Part.* taxis, *g.s.* *appl.* movements from place to place in response to stimuli *appl.* stimuli inducing locomotion.

**tactile** (tāk'tīl) *n.* [L. *tangere* to touch.] *Appl.* capsular corpuscles or cones constituting special sense end-organs of touch.

**tactor** (tāk'tōr) *n.* [L. *tactus* touch.] Tactile end-organ tangoreceptor

**tactual** (tāk'tōāl) *n.* [L. *tactus* touch.] *Part.* sense of touch.

**taenia** (tē'nīā) *n.* [L. *taenia*, ribbon.] A band of nerve or of muscle ligula, *g.s.*

**taeniae** (tē'nīā) *n.* [L. *taenia*, ribbon.] Ribbon-like; striped.

**taenidium** (tē'nīd'īdīm) *n.* *taenidia pl.* [Gk. *taenia* ribbon *idion* *idion*.] Spiral threads strengthening the chitinous layer of insect tracheae.

**taenoid** (tē'nīōid) *n.* [Gk. *taenia*, ribbon *oides* form.] Ribbon-shaped like a tape-worm.

**taenioles** (tē'nīōls) *n. pl.* [L. *taeniola*, small ribbon.] Four longitudinal gastric ridges of a scyphula.

**tagmata** (tāg'mātā) *n. pl.* [Gk. *tagma*, corps.] Units; parts segments groups of segments molecular groups.

**taiga** (tāgā) *n.* [Russ.] Northern coniferous forest zone, especially in Siberia.

**talocalcaneal** (tāl'ōkāl'kē nāl) *n.* [L. *talus* ankle bone *calcaneus* heel.] *Part.* talus or astragalus and calcaneus *appl.* articulation, ligaments.

**talon** (tāl'ōn) *n.* [F. from L. *talus* ankle.] Claw of bird of prey posterior heel of molar tooth.

**taloscaphoid** (tāl'ōskāf'ōid) *n.* [L. *talus* ankle Gk. *skaphe* boat *oides* form.] *Part.* astragalus and scaphoid bone.

**talus** (tāl'ōs) *n.* [L. *talus* ankle.] The ankle bone astragalus.

**tand m.**—*appl.* satellites (*g.s.* separated from each other by constriction).

**tangoreceptor** (tāng'ōrēp'tō) *n.* [L. *tangere* to touch *receptor* receiver.] A receptor sensitive to slight pressure differences.

**tapetal** (tāp'ētāl) *n.* [L. *tapetum* carpet.] *Part.* tapetum *appl.* cells.

**tapetum** (tāp'ētūm) *n.* [L. *tapetum* carpet.] Outer and posterior part of choroid pigment layer of retina main body of fibres of corpus callosum; special nutritive layer investing sporogenous tissue of sporangium.

- taphrophyt (táf'rôfít) *n* [Gk. *taphe* ditch *phyton* plant.] Ditch-dwelling plant.
- tap-root (táp root) *n* [M.E. *tappe* short pipe. A.S. *wyrt* root.] An elongated parent root with secondary roots. acropetal succession persistent primary root.
- tarsal (tár'sál) *a* [Gk. *tarso* sole of foot.] *Part* tarsus of foot and eyelid. *appl* arteries, bones glands.
- tarsale (társá'le) *n*. tarsalla (társállá) *plu* [Gk. *tarso* sole of foot.] Ankle-bones.
- tarsi (tár'sí) *n plu* [Gk. *tarso* sole of foot.] *Plu* of tarsus two thin elongated plates of dense connective tissue helping to support the eyelid.
- ta omeres (tár'ómérs) *n plu* [Gk. *tarso* sole of foot *meros* part.] The two parts of dactylopodite in spiders, besitarsus and telotarsus.
- tarsometatarsal (tár'sómétár'sál) *a* [Gk. *tarso* sole of foot *meta* beyond.] *Part* an articulation of tarsus with metatarsus.
- tarsom tatarsus (tár'sómét ár'súá) *n* [Gk. *tarso* sole of foot *meta* beyond.] A short straight bone of bird leg formed by fusion of distal row of tarsal with second to fifth metatarsals.
- tarsophalangeal (tár'só'fállán jéll) *a*. [Gk. *tarso* sole of foot *phalange* line of battle.] *Part* tarsus and phalanges.
- tarsus (tár'sús) *n*. [Gk. *tarso* sole of foot.] Ankle-bones, usually consisting of two rows segment of leg distal to tibia, in insects telotarsus or second dactylopodite in spiders fibrous connective tissue plat of eyelid.
- tartareo (tártá'réús) *a* [L. *tartareus* acid salt.] Having rough and crumbling surface.
- ta sel (tál) *n* [O F *tares* clasp.] Male inflorescence of many plant appendic colls of goat sheep pig etc.
- taste-bud—an end-organ of taste consisting of flask-shaped group

- of gustatory and supporting cells found on tongue and adjacent parts a gustatory calyculus.
- taulidion (táid'íón) *n*. [Gk. *tau* T; *idion* idiom.] Part of cranial floor of Palaeospondylus.
- tautomeric (tá'tómér'ík) *a*. [Gk. *tauto* the same *meros* part.] *Part* the same part; *appl*. cells, curves with axis cylinders passing into white matter of same side of spinal cord.
- tautonym (tá'tóním) *n*. [Gk. *tauto* the same *onymos* name.] The same name given to a genus and one of its species or subspecies.
- taut type (tá'tótp) *n* [Gk. *tauto* the same *typos* pattern.] A genotype by virtue of tautonymy.
- taxopodous (tá'k'sóp'ódús) *a*. [Gk. *tarso* arrangement *podus* foot.] Having proximal and distal tarsal bones. straight lines parallel to limb axis.
- taxi (tá'k'sí) *n*. [Gk. *tarso* arrangement.] A tendency of an organism towards (positive) or away from (negative) a source of stimulus; directed reaction of a motile animal of tropism.
- taxonomy (tá'k'són ómí) *n*. [Gk. *tarso* arrangement, *nomos* law.] The laws of classification as applied to natural history.
- taxy—taxis.
- teology (tá'k'tó'fí) *n* [Gk. *tekton* builder *logos* discourse.] Morphology in which an organism is considered as a group of morphological as distinct from physiological units or individuals.
- teotial (tá'k'tó'riál) *a*. [L. *tectus* covered.] Covering *appl* membranes covering the spiral organ of Corti.
- teotrium (tá'k'tó'riúm) *n* [L. *tectus* covered.] Membrane of Corti the coverts of birds.
- teotsp dylle (tá'k'tó'spóndí'ík) *a*. [L. *tectus* covered Gk. *spondylus* vertebra.] Having vertebrae with several concentric rings of calcification, as in some lamnibranchia tectospondylious.

tectotype (těk tōtip) *n*. [Gk. *tektōn* builder *typos* pattern] Description of a species, based on microscopical examination of a prepared section the section used.

tectrices (těktrī' ēz, těk'trībēz) *n* *plu*. [L. *tectus* covered.] Wing-coverts; small feathers covering bases of remiges.

tectum (těk'tūm) *n*. [L. *tectum* roof.] A roof like structure, as corpora quadrigemina forming roof of mesencephalon dorsal wall of capitulum in Acarina.

teeth (tēth) *n* *plu*. [A.S. *teoth*, tooth.] Hard bony growths on maxillae premaxillae and mandibles of mammals growths of similar of chitinous or of bony formation borne on jaws, tongue or pharynx.

tegmen (tēg'mēn) *n*. [L. *tegmen*, covering] The integument, endopleura, or inner seed-coat calyx covers of Crinoidae ninth abdominal tergite of male insects anterior wing of Orthoptera thin plate of bone over tympanic antrum. tegmen cranii,—roof of chondrocranium.

tegumentum (tēgmēn'tūm) *n*. [L. *tegmen*, covering] A protective bod-scale dorsal part of cerebral peduncles tegmen.

tegula (tēg'ūlā) *n*. [L. *tegula*, tile.] A small sclerite on mesothorax overhanging articulation of wings in Lepidoptera and Hymenoptera small lobe at wing-base of Diptera.

tegular (tēg'ūlār) *n*. [L. *tegula*, tile.] Part tegula consisting of a tile-like structure.

tegumen (tēg'ūmēn) *n*. [L. *tegumen*, cover] Tegmen ninth abdominal tergite, as in Lepidoptera.

tegument,—integument.

tela (tē'lā) *n*. [L. *tela*, web.] A web-like thurus *appl*. chorionides, folds of the pia mater forming membranous roof of third and fourth ventricles *appl*. interfacing fibrilliform or hyphal thurus of fungi, tela contexta.

telamon (tēl'āmōn) *n*. [Gk. *telamos*, supporting strap.] Chitinised curved

plate in lateral wall of cloaca in male nematodes.

telarian (tēlā rīān) *n*. [L. *tela* web.] Web-spinning.

teleceptor (tēlēsēptōr) *n*. [Gk. *tele* far; L. *capere* to take.] A sense organ which receives stimuli originating at a distance; distance receptor distceptor telereceptor teloreceptor.

telegami (tēlēgām'ik) *n*. [Gk. *tele* far *game* marriage] Attracting females from distance, *appl*. scent-apparatus of butterflies.

telegonist (tēlējōn'ēlīs) *n*. [Gk. *tele* afar *gonos* descent.] Artificial insemination.

telegony (tēlēgō'nī) *n*. [Gk. *tele* far *gonos* offspring] The supposed influence of a male parent on offspring subsequent to his own, if the same female parent by another sire.

telelanthous (tēl'ān'thōs) *n*. [Gk. *telos* complete *anthos* flower] *Appl*. flower having both gynoecium and androecium.

tel in tucarpal (tēl'ēmētākir'pāl) *n*. [Gk. *tele*, far *meta*, after; *kerpos* wrist.] *Appl*. condition of retaining distal elements of metacarpals, as in some Cervidae. *Opp*. plethometacarpal.

telencephalon (tēl'ēnkēf'ālōn, -ēl) *n*. [Gk. *tele* far *enkephalos* brain.] The anterior part of fore brain, including the cerebral hemispheres lateral ventricles, optic part of hypothalamus, and anterior portion of third ventricle end-brain.

teleodont (tēl'ēdōnt) *n*. [Gk. *telos* complete *odon* tooth.] *Appl*. forms of stag beetles with largest mandible development.

teleology (tēl'ēlōj'ijī) *n*. [Gk. *telos* complete *logos* discourse.] The doctrine of adaptation to definite purpose and that evolution is purposive.

teleophore (tēl'ēd'fōr) *n*. [Gk. *telos* complete *phoros* to bear] A gonotheca, or transparent case enclosing medusae of Hydrozoa.

teleoptile (tél'ètèl pìl) *n* [Gk. *telos* complet *ptilon* feather] A feather of definitiv plumage; cf neoptile neosoptile *a* pennaceous feather of mesoptile metoptile.

teleorganic (tél'fòrgàn'ík) *a*. [Gk. *telos* complete *organon* instrument.] *Appl.* functions vital to an organism.

t leosis (tél'èòis) *n*. [Gk. *telos* complet] Purposeful development or evolution.

t lereceptor—teleceptor *q.v.*

telescopiciform (tél'èskòp'ifòrm) [Gk. *tele* far *skopiein* to view *L. forma* shape.] Having joints that telescope into each other.

telethmoid,—prenasal *q.v.*

teleutosorus (tél'ù'tòs'òrùs) *n*. [Gk. *telos* completion *soros* heap] A group of developing teleutospores sorus of last summer-stage of certain rust fungi telum

teleutospore (tél'ù'tòspòr) *n* [Gk. *telos* completion *spheros* seed.] In Uredinales, a winter-spore formed in autumn, germinating in following spring teliospore, teleutobud or winter bud teleutogonium, brand spore.

teleutosporeiferous (tél'ù'tòspòr'if'èrùs) *a*. [Gk. *telos* completion *spheros* seed *L. ferre* to carry] *Appl.* rusts bearing teleutospores teleosporiferous

telic (tél'ík) [Gk. *telos* end] Purposeful *pari teleos*

t liosorus,—teleutosorus *q.v.*

t liospore—teleutospore, *q.v.*

teliosstage (tél'ìòstìj) *n* [Gk. *tele* end *F. stage* stage, from *L. stare* to stand] Last summer-stage of cereal fungi in which telia are produced teleutoform stage.

telium (tél'ùm) *n* [Gk. *telos* end] A teleutosorus.

teloblast (tél'òblàst) *n*. [Gk. *telos* end *blastos* bud.] A stage derived from tritoblast and dividing into sporoblasts in Neosporidia large cell which buds forth rows of smaller cells, as in annelid embryos

t locentric (tél'òsèn'ìrìk) *a* [Gk. *telos* end *kentron* centre] With terminal centromere, *appl.* chromosomes of acrocentric, metacentric.

telocoel (tél'òsèl) *n*. [Gk. *telos*, end *koile* hollow] First, or second, ventricle of brain lateral ventricle telencephalic vesicle

telodendrion (tél'òdèn'drìon) *n*. [Gk. *tele* end *dendron* dim of *dendron* tree.] The terminal arborization of an axon.

t lokinesis (tél'òkìn'è'sis) *n* [Gk. *telos* end *kinesis* movement.] Last stage of mitosis when daughter nuclei are re-formed changes in cell after telophase.

teleleicthal (tél'òl'è's'nhàl) *a*. [Gk. *telos* end *lekithos* yolk.] Having yolk accumulated in one hemisphere as in mesoleicthal and poly-leicthal eggs.

telelemma (tél'òl'è'm) *n*. [Gk. *telos* end *lemma* skin.] A capsul containing a nerve-fibre termination in neuromuscular spindles end-sheath.

telome (tél'ò'm) *n*. [Gk. *telos* end.] Morphological unit, consisting of stalk and sporangium, in cormophytes porophytic unit terminal part of mesome

telomere (tél'ò'm'èr) *n* [Gk. *telos* end *meros* part.] End of each chromosome arm distal to centromere

telomitic (tél'òm'ìt'ík) *a* [Gk. *telos* end *mitos* thread] Having chromosomes attached endwise to spindle-fibres having centromere terminal.

t lophase (tél'òf'èz) [Gk. *telos*, end *phasis* aspect.] Final phase of mitosis with cytoplasm division.

telophragma (tél'òf'räg'mà) *n* [Gk. *tele* end *phragma* fence] The Z-disc Krause's membrane separating sarcomeres of muscle fibrils.

telosynapsis,—telosyndesis *q.v.*

- telosyndesis** (tél'elodé'sis) *n.* [Gk. *telos* end *syndesis* binding together] End to end union of chromosome halves in meiosis.
- telotarsus** (tél'otár'sos) *n.* [Gk. *telos* end; *tarsus* sole of foot.] Distal part or tarsus of dactylopodite of spiders. *Cf.* tarsomeres.
- telotaxis** (tél'oták'sis) *n.* [Gk. *telos* end *taxis* arrangement.] Movement along line between animal and source of stimulus goal orientation.
- telotroch** (tél'trók) *n.* [Gk. *telos* end *trochos* wheel.] Pre-anal tuft of cilia of trochophore.
- telotrocha**,—trochosphere, *q.v.*
- telotrophic** (tél'tróf'ik) *a.* [Gk. *telos* end *trophos* nourishment.] Acrotrophic, *appl.* ovarioles.
- telson** (tél'son) *n.* [Gk. *telos* extremity] The unpaired terminal abdominal segment of Crustacea and Limulus, bearing caudal spine or sting in scorpions twelfth abdominal segment in Protura and in some insect embryos.
- telum** (tél'tum) *n.* [Gk. *telos* end.] Last abdominal segment of insect.
- temnospondylous** (tém'nospón'dílos) *a.* [Gk. *temnein*, to cut *spondyles* vertebrae.] With vertebrae not fused but in articulated pieces of stereospondylous.
- temperatur coefficient**,—quotient of two growth rates at temperatures differing by 10° C.
- t temporal** (tém'pórál) *a.* [L. *tempus*, temple.] Part or in region of temples.
- temporalis**,—broad radiating muscle arising from whole of temporal fossa and extending to coronoid process of mandible.
- t temporomalar** (tém'pórémá'lár) *a.* [L. *tempus*, temples *mala*, cheek.] *Appl.* branch of maxillary nerve supplying temple and cheek, trigeminal nerve.
- t temporomandibular articulation**,—the hinge of the jaws.
- t temporomaxillary** (tém'pórémá'kál'ár) *a.* [L. *tempus*, temples

*maxilla* jaw] Part temporal and maxillary region; *appl.* posterior facial vein.

- t nectium** (tè'èk' sítum) *n.* [L. *tenax* holding] Holdfast of algae an ectodermal area modified for adhesion of sand-grains in certain sea-anemones; in teleosts, fibrous band extending from eye-ball to skull
- tendines**,—tendons *plur* of tendo.
- tendinous** (tèn'dínús) *a.* [L. *tendere* to stretch.] Of the nature of tendon having tendons.
- t do calcaneus, tend Achilles**,—the tendon of the heel.
- tendon** (tèn'don) *n.* [L. *tend* tendon, from *tendere* to stretch.] A white glistening fibrous cord connecting a muscle with movable structure.
- t adon reflex**,—contraction of muscles in state of slight tension by tap on their tendons.
- tendrill** (tèn'dríl) *n.* [O F *tendrillon*, tender spring] A specialised twining stem or leaf by which creepers support themselves.
- tendrill-fibres**,—cerebellar fibres with branches adhering to dendrites of Purkinje's cells clinging fibres of basket cells.
- tendrillar** (tèn'drílár) *a.* [O F *tendrillon*, tender spring] Acting as tendrill twining
- tenent** (tèn'ènt) *a.* [L. *tenere* to hold.] Holding *appl.* tubular hairs with expanded tips, of arolium.
- teneral** (tèn'trál) *a.* [L. *tener* tender] Immature *appl.* stage on emergence from nymphal integument.
- tenia**,—taenia, *q.v.*
- tenoöbrill** (tèn'öf'bríl) *n. plur.* [L. *tenere* to hold *fibrilla*, small fibre] Delicate fibrils connecting epithelial cells and passing through intercellular bridges.
- T on**, capsul of [J R Tenon French anatomist]. The fibro-elastic membrane surrounding the eye-ball from optic nerve to ciliary region fascia bulbi.



**receptor** (tēn ðrēp tō) *n* [Gk. *tenon* tendon L. *reperire* to receive] A proprioceptor tendon reacting to contraction.

**tensor** (tēn sōr) *a*. [L. *tendere* to stretch.] *Appl* muscles which stretch parts of body

**tentacles** (tēn'tākiz) *n. plu* [L.L. *tentaculum* feeler] Slender flexible organs on head of many invertebrate animals, used for feeling exploration prehension or attachment adhesive structures of insectivorous plants, as of sundew of antenna.

**teatacular** (tēntāk'ālār) *a*. [L.L. *tenaculum* feeler] *Peri* tentacles *appl* a canal branching from per radial canal to tentacle base in Ctenophora.

**tentaculiferous** (tēntāk'ālīf'ērōs) *a*. [L.L. *tentaculum* feeler L. *ferre* to carry] Bearing tentacles.

**teataculiform** (tēntāk'ālīfōrm) *a*. [L.L. *tentaculum* feeler L. *forma* shape.] Like a tentacle in shape or structure.

**tenaculocyst** (tēntāk'ālōdsī) *n*. [L.L. *tentaculum* feeler Gk. *kystis* bladder] A sense organ of Trachymene club-shaped body on umbrella margin containing one or more lathes.

**tenaculoroids** (tēntāk'ālōdō'ōids) *n. plu* [L.L. *tentaculum* feeler Gk. *zoön* animal *eidos* form.] Long slender tentacular individuals outside of hydrosoma colony

**tentaculum** (tēntāk'ālūm) *n*. [L.L. *tentaculum* feeler] A tentacle or feeler

**tentilla** (tēntīl'ā) *tentillum* (tēntīl'ām) *n*. [L. *tenere* to feel.] A tentacle branch.

**tentorium** (tēntō'rīūm) *n*. [L. *tentorium* tent] A chitinous framework supporting brain of insects a transverse fold of dura mater ossified in some mammals, between cerebellum and occipital lobes of brain.

**tepal** (tēp'āl) *n*. [F *sepale* from *petale*] A perianth segment which is sepaloid or petaloid.

**teratology** (tēr'atōl'ōjī) *n* [Gk. *teras* monster *logos* discourse] Science treating of malformations and monstrosities of plants and animals.

**tercin** (tēr'sīn) *n*. [L. *tertius* third.] The third coat of an ovule or a layer of the second.

**terebra** (tēr'ēbrā) *n*. [L. *terebra*, borer] An ovipositor modified for boring sawing or stinging as in certain Hymenoptera.

**terebrate** (tēr'ēbrāt) *a*. [L. *terebra* borer] Furnished with a boring organ adapted for boring

**teres** (tēr'ēs) *n*. [L. *teres*, rounded.] The round ligament of liver two muscles, *teres* major and minor extending from scapula to humerus.

**terete** (tērēt') *is* *etial* (tērē'shīāl) *a*. [L. *teres* rounded.] Nearly cylindrical in section as stems.

**tergal** (tēr'gāl) *a*. [L. *tergum* back.] Situated at back *peri* tergum.

**tegeminate** (tēgēm'ināt) *a*. [L. *ter* three *gemini* twins.] Thrice forked with twin leaflets.

**tergite** (tēr'jīz) *n*. [L. *tergum* back.] Dorsal chitinous plate of each segment of most Arthropoda a tergite sclerite.

**tergosternal** (tēr'gōstēr'nāl) *a*. [L. *tergum* back *sternum* breast bone.] Connecting tergite and corresponding sternite *appl* muscles in insects.

**tergum** (tēr'gūm) *n*. [L. *tergum* back.] Dorsal portion of arthropod somite notum back generally dorsal plate of barnacles.

**terminal** (tēr'mīnāl) *a*. [L. *terminatus* end] *Peri* or situated at the end as terminal bud at end of twig *appl* cranial nerve ending in nasal mucosa the nervus terminalis or preoptic nerve *appl* filament, slender prolongation of ovariole; *appl* chlamys at extreme end of chromatid *appl* gene at end of telomere

**terminalla** (tēr'mīnāl'īā) *n. plu* [L. *terminatus* end.] External genitalia, or hypopygium in D ptera.

terminalisation (tēr'mīnālīzā'shūn) *n.* [L. *terminalis* end.] Movement of chromatids towards chromosome ends during diplotene and diakinesis.

termitarium (tēr'mītā'riūm) *n.* [L. *termit* wood worm.] An elaborately constructed nest of a termite colony.

termitophil (tēr'mītō'fīl) *a.* [L. *termit* wood-worm. Gk. *philo* to love.] Living in termite nest *appl.* certain insects.

terrones (tēr'mīnā) *n. pl.* [Gk. *terron*, limit.] Sex-determining substances or hormones, as in certain protozoa.

terary (tēr'nārī) ternate (tēr'nātī) *a.* [L. *terni* three each.] Arranged in threes having three leaflets to leaf trifoliate trilobate *appl.* symmetry.

ternatopinnate (tēr'nātōpīn'at) *a.* [L. *terni* three each; *pinn*, feather.] Having three pinnate leaflets to each compound leaf.

terraceous (tēr'sā'shūs) *a.* [L. *terra*, earth.] *Appl.* land vegetation.

terrestrial (tēr'strī'āl) *a.* [L. *terra*, earth.] *Appl.* organisms living on land; of aerial, aquatic.

terricolous (tēr'kōlūs) [L. *terra* earth *col* to inhabit.] Inhabiting the soil terrestrial, *q.v.*

terrigeneous (tēr'jē'nūs) *a.* [L. *terra*, earth; *gignere* to produce.] Derived from land; *appl.* deposits.

territory (tēr'kōrī) *n.* [L. *territorium* domain.] An area defended by a bird shortly before and during the breeding season; an area sufficient for food requirements of an animal or aggregation of animals; foraging area.

tertil (tēr'shāl) *n.* [L. *tertius* third.] A scapular or tertiary wing-feather.

tertiary (tēr'shāl'ārī) *a.* [L. *tertius* third.] *Appl.* roots produced by secondary roots *appl.* inner wall of some wood fibres tertil, *appl.* wing feathers of humerus, otherwise scapular.

Tertiary *Appl.* era following the Mesozoic and preceding Quaternary earlier period of Cenozoic era, Eocene to Pliocene epochs.

tessellated (tēs'shāt'ēd) *a.* [L. *tessella*, small stone cube.] Checkered *appl.* markings or colours arranged in squares *appl.* epithelium.

tesserae (tēs'shē) *n. pl.* [L. *tessera*, square block.] Prisms of lime in calcification of cartilage.

test (tēs't) *n.* [L. *testis* shell.] A shell or hardened outer covering.

testa (tēs'tā) *n.* [L. *testis*, shell.] Test outer coat of seed or epispERM.

testaceous (tēs'shā'shūs) *a.* [L. *testis*, shell.] Protected by shell-like outer covering.

testicl (tēs'tīkl) *n.* [L. *testis* testicle.] Testis.

testicular (tēs'tīkl'ār) *a.* [L. *testis* testicle.] Having two oblong tubercles, as in some orchids.

testicle-shaped testiculate *part.* testis.

testis (tēs'tīs) *n.* testes (tēs'tēs) *pl.* [L. *testis* testicle.] Male reproductive glands producing spermatozoa.

testosterone (tēs'tōstēr'ōn) *n.* [L. *testis* testicle. Gk. *steros* wurt.] Testicular hormone  $C_{19}H_{28}O_2$ .

testudinate (tēs'tūdīnāt) *a.* [L. *testudo* tortoise.] Having a hard protective shell, as in tortoise.

tetaniform (tēr'tānīfōrm) *a.* [Gk. *tetanos* stretched. L. *forma*, shape.] Like tetanus tetanoid.

tetanus (tēr'tānūs) *n.* [Gk. *tetanos* stretched.] To cause a muscle to contract by series of induction shocks.

tetanus (tēr'tānūs) *n.* [Gk. *tetanos* stretched.] State of muscle under going continuous fused series of contractions due to electrical stimulation rigid state of plant tissue caused by continued stimulus.

teth lin (tēs'th'lin) *n.* [Gk. *tethalios* swelling.] Growth-promoting principle isolated from pituitary body.

tetrabranchial (tēr'trābrāng'kiāl) *a.* [Gk. *tetras* four; *branchia*, gills.]  $\equiv$  wing four gills.

t **tracarpellary** (tēt'rākār'pēlārī) *n.* [Gk. *tetras* four *karpos* fruit.] Having four carpels.

t **tetracerous** (tēt'rākā'ērūs) *n.* [Gk. *tetras* four *keras* horn.] Four horned

t **trachaeum** (tēt'rākē'nīūm) *n.* [Gk. *tetras* four *a* not *chain* *ri* to gape.] Four adherent achenes, as constituting fruit of Labiatae.

t **tetrachotomous** (tēt'rākōt'ōmīās) *n.* [Gk. *tetrache*, fourfold *teme* cutting.] Divided up into four.

t **tetracoccus** (tēt'rākōk'ūs) *n.* [Gk. *tetras* four *bakchos* kernel.] Any minute organism found in groups of four

t **tetracotyledonous** (tēt'rākōtēl'ē'dōn-ūs) *n.* [Gk. *tetras* four *bakylōn* cup-like hollow.] With four cotyledons.

t **tetracrepid** (tēt'rākrep'īd) *n.* [Gk. *tetras* four *krepis* edge.] *Appl* min to caltrop four rayed spicule.

t **tract** (tēt'rākt) *n.* [Gk. *tetras* four *aktis* ray.] A four rayed petiole.

t **tetractine** (tēt'rākt'īn) *n.* [Gk. *tetras* four *aktis* ray.] A spicule of four equal and similar rays meeting at equal angles tetragon

t **tetracyclic** (tēt'zā'klīk) *n.* [Gk. *tetras* four *kyllos* circle.] With four whorls.

t **tricyte** (tēt'rāsh) [Gk. *tetras* four *kyllos* hollow.] One of four daughter-cells formed from mother-cell by meiosis.

t **tetrad** (tēt'rād) *n.* [Gk. *tetras* four.] A group of four *appl* four spores formed by first and second meiotic divisions of spore mother-cell four-cell stage in development of bryophytes and pteridophytes quadruple group of chromatids meiosis quadrangular mass or loop of chromosomes in stage of mitosis of quartet.

t **tetractyl** (tēt'rādākt'īl) *n.* [Gk. *tetras* four *daktylos* finger.] Having four digits

t **tetradynamus** (tēt'rādīn'īrūs) [Gk. *tetras* four *dynamis* power.] Having four long stamens and two short.

t **tetragenic** (tēt'rājēnīk) [Gk. *tetras* four *genos* descent.] Controlled by four genes.

t **tetragonal** (tēt'rāg'ōnāl) *n.* [Gk. *tetras* four *gonia*, angle.] Having four angles quaternary

t **tragnon** (tēt'rāj'tōnūs) *n.* [Gk. *tetras* four *gynē* female.] With four carpels to gynoecium.

t **tetralophodont** (tēt'rālōf'ōdōnt) *n.* [Gk. *tetras* four *lophas* crest *odous* tooth.] *Appl* molar teeth with four ridges.

t **tralephous** (tēt'rālōf'ūs) *n.* [Gk. *tetras* four *lophas* crest.] *Appl* a spicule with four rays branched or crested.

t **tramrous** (tēt'rām'ērūs) *n.* [Gk. *tetras* four *meros* part.] Composed of four parts in multiples of four

t **tetramite** (tēt'rāmīt) *n.* [Gk. *tetras* four *mitos* thread.] A tetrad formed by four parallel chromatids prior to diakinesis.

t **tetramorphic** (tēt'rāmōrf'īk) *n.* [Gk. *tetras* four *morphe* form.] Having four forms of four different lengths, as basidia.

t **tetrandrous** (tēt'rān'drūs) *n.* [Gk. *tetras* four *aner* man.] Having four stamens.

t **tetrapetalous** (tēt'rāpēt'ālūs) *n.* [Gk. *tetras* four *petalon* leaf.] Having four petals.

t **tetraploid** (tēt'rāplōīd) *n.* [Gk. *tetraplo* fourfold.] With four times the normal haploid number of chromosomes. *n.* A organism with four chromosome sets.

t **tetrapneumonous** (tēt'rāpnēmōn-ūs) *n.* [Gk. *tetras* four *pneumon*, lung.] Having four lung books, as certain spiders.

t **tetrapod** (tēt'rāpōd) *n.* [Gk. *tetras* four *pus* foot.] A four-footed animal quadruped.

t **tetrapterous** (tēt'rāptērūs) *n.* [Gk. *tetras* four *pteron* wing.] Having four wings

- tetrapyreous (tēt'ɪpɪr'ɛnəs) *n* [Gk. *tetras* four *pyrex*, fruit-stone.] Having four fruit-stones being four-stoned fruit.
- tetraquetrus (tēt'rākwēt'rus) *n*. [Gk. *tetras* four L. *quadratus* squared.] Having four angles, as some stoma.
- tetrarch (tēt'rārk) *n* [Gk. *tetras* four *arche* beginning] With four protoxylem bundles.
- tetraselenodont (tēt'rāsēlō'nōdōnt) *n*. [Gk. *tetras* four *seleno* moon *odous* tooth.] Having four crescentic ridges on molar teeth.
- tetrasepalous (tēt'rāsēp'ālūs) *n*. [Gk. *tetras* four F. *sepal* sepal] Having four sepals.
- tetrasom (tēt'riāōm) *n* [Gk. *tetras* four *soma*, body] Association of four homologous chromosomes in meiosis.
- tetrasomi (tēt'riāō'mīk) *n*. [Gk. *tetras* four *soma*, body] Part or having four homologous chromosomes. *n*. An organism with four chromosomes of one type.
- tetraspermous (tēt'riāpēr'mūs) *n*. [Gk. *tetras* four *sperma*, seed] Having four seeds.
- tetrasporangium (tēt'riāpōr'āŋŷūm) *n*. [Gk. *tetras* four *spore* seed *angreion*, vessel.] Sporangium producing tetraspores, as in red algae.
- tetraspore (tēt'riāpōr) *n*. [Gk. *tetras* four *spore* seed.] One of group of four non-motile spores produced by sporangium of certain algae.
- tetrasporocystid (tēt'riāpō'rōstīd) *n*. [Gk. *tetras* four *spore* seed *kystis* bladder] Appl. oocyst of Sporozoa when four sporocysts are present.
- tetrastichous (tēt'rāstīkūs) *n*. [Gk. *tetras* four *stichos* row] Arranged in four rows.
- tetrathecal (tēt'rāthē'kāl) *n*. [Gk. *tetras* four *thekos* case.] Having four loculi quadrilocular.
- tetraxon (tēt'rāxōn) [Gk. *tetras* four *axon* axis.] A tetractine.
- tetrazole (tēt'riāō'lk) *n*. [Gk. *tetras* four *zōon* animal.] Having four sporozoites *appl.* spores of Coccidia.
- tetrazooid (tēt'riāō'oid) *n* [Gk. *tetras* four *zōon* animal *oides* form.] Zooid developed from each of four parts constricted from stolon process of embryonic ascidian.
- thalam cephalon (thāl'āmēkēf'ālōn, -ēf) *n* [Gk. *thalamos* chamber *enkephalos* brain.] The part of the fore-brain comprising thalamus, corpora geniculata and epithalamus.
- thalam mamillary (thāl'āmōmām'flārī) *n*. [Gk. *thalamos* chamber L. *mamilla*, nipple.] Appl. fasciculus or bundle of Vicq-d'Azyr from corpus mamillare to thalamus.
- thalamus (thāl'āmōs) *n*. [Gk. *thalamos* chamber] The receptacle or torus of flower ovoid ganglionic mass on either side of third ventricle of brain.
- thalassi (thālās'īn) *n*. [Gk. *thalassa*, sea] A toxin of sea anemone tentacles.
- thalassoid (thālās'oid) *n*. [Gk. *thalassa*, sea *oides* form.] Part fresh-water organisms resembling or originally marine forms pseudomarine halophilic.
- thalassophyte (thālās'ōft) *n* [Gk. *thalassa*, sea *phyton*, plant.] Any marine alga.
- thalassoplankton (thālās'ōplāŋkt'ōn) *n*. [Gk. *thalassa*, sea *planktos* wandering] Marine plankton.
- thallin (thāl'īn) *n*. [Gk. *thallos* young shoot.] Consisting of thallus thalloid.
- thalloid (thāl'oid) *n*. [Gk. *thallos* young shoot *oides* form.] Resembling thallus *appl.* excip. formed by thalloid hyphae.
- thall see (thāl'ōen) *n*. [Gk. *thallos* young shoot.] A thallus like structure thallus.
- thallophyte (thāl'ōft) *n*. [Gk. *thallos* young shoot *phyton* plant.] A plant not differentiated into stem and root, varying widely in form as algae fungi, and lichens. *Opp.* cornophyte.

thallospor (thál'əpōr) *n* [Gk. *thallas* young about *sporos* seed.] Spore cell in vegetative part of a fungus.

thallus (thál'ūs) *n*. [Gk. *thallo* young about.] A combination of cells presenting no differentiation of leaf and stem as in *Thallophyta*.

thanatoid (thán'atoid) *a*. [Gk. *thana-* death *eidos* form] Deadly *appl.* poisonous snakes resembling death.

thanatology (thán'atō'yōl) *n* [Gk. *thanas* death *logos* discourse.] Theories concerning death.

thanatosi (thánatō'sis) *n* [Gk. *thanas* death.] Habit act of feigning death death of part.

thebesian (thēbē'shān) *a*. [A C *Thebesius* German anatomist] *Appl.* valve of coronary sinus.

theca (thē'kā) *n*. [Gk. *theks* case.] A spore or pollen case a sporangium capsule structure serving as protective covering for organ or organism as of spinal cord follicle pupa, proboscis, tube-animal.

thecyst (thē'kāsist) *n*. [Gk. *theks* case *kystis* bladder] Sperm envelope or spermatophore formed by permatheca.

thecapore (thē'kāpōr) *n*. [Gk. *theks* case *phorin* to bear] A structure on which theca is borne.

thecaporous (thē'kāpō'rūs) *a*. [Gk. *theks* case *poros* seed.] Having spores enclosed.

thecate (thē'kāt) *a*. [Gk. *theks* case.] Covered protected by theca theciferous thecigerous.

thecium (thē'siūm) *n*. [Gk. *theks* case] That part of a fungus lichen containing the sporules.

thecodont (thē'kōdōm) *a*. [Gk. *theks* case *odous* tooth.] Having teeth in sockets.

thelin (thē'lin) *n*. [Gk. *thelys* female.] Follicular hormone folliculin oestrin oestrons  $C_{18}H_{26}O$

thelol (thē'lōl) *n*. [Gk. *thelys* female.] Hydrated thecol occurring in female urine oestriol  $C_{18}H_{24}O$

thelyblast (thē'thīblast) *n* [Gk. *thelys* female *blastos* bud.] A matured female germ cell.

thelygenic (thē'thēn'ik) *a*. [Gk. *thelys* female *genes* producing] Producing offspring preponderantly or entirely female thelytocous.

thelytoky (thē'thō'tōk) *n* [Gk. *thelys* female; *tokos* offspring] Parthenogenesis in case where females only are produced; thelytoky

thelyplasm (thē'thīplāsm) *n*. [Gk. *thelys* female *plasma*, mould.] Female plasm of arrhenoplasm.

thenal (thē'nāl) *a*. [Gk. *thener* palm of hand.] Pert or in region of palm of hand.

th nar (thē'nār) *n*. [Gk. *thener* palm of hand.] The muscular mass forming ball of thumb

th rmalum (thērō'mālūm) *n* [Gk. *thermos* hot springs.] Plant community in warm or hot springs.

thermoelastogamy (thēr'mōlēstōg'ām) *n*. [Gk. *thermos* heat; *elastos* closed *gamos* marriage.] Self pollination of flowers when unopened owing to unfavourable temperature.

th rmocline (thēr'mōklīn) *n* [Gk. *thermos* heat *klinein* to swerve] More or less abrupt change in water temperature in relation to depth *appl.* layer between upper and deep layers, also to seasonal temperature change within the upper mixed layer

thermogenesis (thēr'mōjēn'ēsis) *n*. [Gk. *thermos* heat *genesis* production.] Body-heat production by oxidation heat production by bacteria.

the molysis (thēr'mōl'īsis) *n*. [Gk. *thermos* heat *lysis* loosening] Loss of body heat.

th rmonasty (thēr'mōnās'tis) *n*. [Gk. *thermos* heat *nastes* close pressed.] Plant movement in response to variations of temperature

thermoperiodicity (thēr'mōpēr'īōd'is'tis) *n*. [Gk. *thermos* heat; *periodos* period.] Effects of temperature difference between light and dark period upon plants.

**thermophase** (thēr'mōfāz) *n*. [Gk. *thermos* heat *phainō*, to appear] First developmental stage in some annual and perennial plants, and which can be partly or entirely completed during seed ripening if temperature and humidity are favourable vernalisation phase.

**thermophil** (thēr'mōfil) *a*. [Gk. *thermos*, heat *philo* loving] Thriving at relatively high temperatures, above 40 C., *appl.* certain bacteria thermophilic. *n*. Thermophile.

**thermophylactic** (thēr'mōfilāk'tik) *a*. [Gk. *thermos* heat *phylaktikos* fit for preserving] Heat resistant tolerating heat, as certain bacteria.

**thermophyte** (thēr'mōfit) *n*. [Gk. *thermos* heat; *phyon* plant.] A heat-tolerant plant thermophyte, *q.v.*

**thermoscopic** (thēr'mōskōp'ik) *a*. [Gk. *thermos* heat; *skopein*, to view] Adapted for recognising changes of temperature, as special sense-organs of certain cephalopods.

**thermotacti** (thēr'mōtāk'tik) *a*. [Gk. *thermos* heat *taxis* arrangement.] *Part* thermotaxis *appl.* optimum, the range of temperature preferred by an organism.

**thermotaxis** (thēr'mōtik'sis) *n*. [Gk. *thermos* heat *taxis* arrangement.] Locomotor reaction to temperature stimulus.

**thermotropism** (thēr'mōt'rōpizm) *n*. [Gk. *thermos* heat *tropis* turn.] Curvature in plants in response to temperature stimulus.

**thorophyllous** (thēr'fīl'ūs) *a*. [Gk. *thoras* summer *phylon* leaf.] Having leaves in summer with deciduous leaves.

**therophyte** (thēr'ōfit) *n*. [Gk. *thermos* summer *phylon*, plant.] A plant which completes life-cycle within single season, being dormant as seed during unfavourable period as annual.

**thorocytes** (thēr'ōsēts) *n. plu.* [Gk. *thoris* deposit *kytos* hollow]

Sponge cells storing reserve material.

**theta** (θ) *f. ctor*—the thyrotropic hormone.

**thiamine**—aneurin or vitamin B<sub>1</sub>, antineuritic or antiberiberi vitamin, found in rice polishings cereals, and yeast C<sub>12</sub>H<sub>18</sub>N OSCl<sub>2</sub>.

**thigmoocyte** (thig'mōēt) *n*. [Gk. *thigmos*, touch *kytos* hollow] A corpuscle which undergoes cytolysis on contact with foreign substance.

**thigmomorphosis** (thig'mōmōr'fōsis, -mōr'fō'sis) *n*. [Gk. *thigmos*, touch; *morphosis* *f. rm.*] Structural change due to contact swelling at ends of contacting syngophores.

**thigmotaxi** (thig'mōtāk'sis) *n*. [Gk. *thigmos*, touch *taxis* arrangement] The tendency of minute organisms to attach themselves to objects on contact locomotor reaction to touch stimulus.

**thigmotropism** (thig'mōt'rōpizm) *n*. [Gk. *thigmos*, touch *tropis* turn.] The tendency to respond to mechanical contact by clinging and curving as in tendrils; response to stimulus of contact.

**thiophyt** (thī'ōfit) *n*. [Gk. *thos* sand-heap *phyon*, plant.] Dum plant.

**thiogenic** (thīj'ēn'ik) *a*. [Gk. *thios*, sulphur *genesis* to produce.] Sulphur producing *appl.* bacteria utilising sulphur compounds.

**thiophil** (thī'ōfil) **thiophili** (thī'ōfil'ik) *a*. [Gk. *thios* sulphur *phileo* to love] Thriving in the presence of sulphur compounds *appl.* bacteria.

**thoraci** (thōrāk'ik) *a*. [Gk. *thorax* chest.] *Part* or in region of thorax.

**thoracic index**,—one hundred times depth of thorax at nipple level divided by breadth.

**thoracolumbar** (thō'rākulūm'bār) *a*. [Gk. *thorax* chest *L. lumbus* loin.] *Part* thoracic and lumbar part of spine *appl.* crura, the sympathetic system.

thorax (thō rāks) *n* [Gk. *thorax* chest.] 1 higher vertebrates that part of body between neck and abdomen containing heart lungs etc. body region behind head of other animals.

thr ad cells,—stinging cells or cnidoblasts in coelenterates in skin of myxinoidea, cells whose long threads form a network in which mucous secretion of ordinary gland cells is entangled.

thre d press—the muscular portion of a spanning tube.

three-nerved leaf—a leaf with three distinct primary veins.

thr mnatolgy (thrēm'ndōl oji) *n*. [Gk. *thromos* nursing *logos* discourse.] The science of breeding animals and plants under domestic conditions.

threshold,—limen, *g*

thr mbin (thrēm'bin) *n*. [Gk. *thrombos* clot.] Fibrin-ferment which converts fibrinogen into fibrin.

thrombocytes (thrēm'bōits) *n. plu* [Gk. *thrombos* clot *kytos* hollow.] Blood-platelets in non-mammalian vertebrates nucleated spindle shaped cells concerned with clotting of blood.

thr mbogen (thrēm'bōēn) *n*. [Gk. *thrombos* clot *genesis* producing.] Prothrombin.

thrombokinasē (thrēm'bōkīnās) *n* [Gk. *thrombos* clot *kinesis* to move.] A factor which, with calcium activates prothrombin to form thrombin found in tissues and blood platelets thromboplastin.

thr mboplastid (thrēm'bōplās tid) *n* [Gk. *thrombos* clot *plastis* moulded.] A blood platelet.

thromboplastin (thrēm'bōplās'tin) *n* [Gk. *thrombos* clot *plastis* moulded.] Thrombokinasē or thromboplastic factor thrombolytic cytolysine.

thrombosis (thrēm'bōsis) *n* [Gk. *thrombos* clot.] Clotting as of blood.

thromboxysē (thrēm'bōxīm) *n* [Gk. *thrombos* clot *synē* leaven.] Thrombokinasē

thrum-eyed—short-styled with long

stamens extending to mouth of tubular corolla. *Opp* pin-eyed.

thylosos (thī'lōsēs) *n. plu*. [Gk. *thylosos* pouch.] Masses of parenchyma formed inside wood vessels through pressure in secondary wood tyloses, *g*

thymocyte (thī'mōēt) *n*. [Gk. *thymos* thymus *kytos* hollow.] A small lymphocyte in cortex of thymus.

thymovidin (thī'mō vīdīn) *n*. [Gk. *thymos* thymus *L. ovum* egg.] A thymus hormone of birds which influences egg albumin and shell formation

thymus (thī'mūs) *n*. [Gk. *thymos* thymus.] An endocrine gland in lower anterior part of neck, or surrounding heart, in man regressing after maximum development at puberty

thyreo,—see thyro-

thyreoid (thī'rōid) *n*. [Gk. *thyreas* oblong shield *eides* form.] Shield shaped petal thyrod. *n*. An endocrine gland, the thyroid *g*

thyridium (thīrīd'īūm) *n*. [Gk. *thyra* door *idion* dim.] Hairless whitish area on certain insect wings.

thyro-arytaenoid (thī'rōrītē'noid) *n*. [Gk. *thyra* door *arytaena*, pitcher; *eides* form.] A muscle of larynx.

thyroepiglottic (thī'rōēp'īglōt'ik) *n*. [Gk. *thyra*, door *epi* upon *glottis*, tongue.] *Appl* ligament connecting epiglottis stem and angle of thyroid cartilage

thyroglossal (thī'rōglō'sāl) *n*. [Gk. *thyra*, door *glossa* tongue.] Part thyroid and tongue *appl* an embryonic duct, the ductus thyroglossus.

thyrohyals (thī'rōh'āls) *n. plu*. [Gk. *thyra* door *hyoides* Y-shaped.] Greater cornua of hyoid bone.

thyrohyoid (thī'rōh'ōid) *n*. [Gk. *thyra* door *hyoides* Y-shaped.] *Appl* muscle extending from thyroid cartilage to hyoid cornu.

thyroid (thī'rōid) *n*. [Gk. *thyra* door *eides* form.] Shield-shaped *appl* ductless highly vascular gland at front and sides of neck also in

arteries, cartilage and cune.

The thyroid gland

thyrotrophin (thi'rōtrōf'ik) *n.* [Gk. *thyre* door *trophē* nourishment.]

*Appl.* prepituitary hormone which stimulates growth and function of thyroid gland thyrotropic.

thyroxin (thi'rōksin) *n.* [Gk. *thyre* door; *oxys* sharp.] A compound isolated from thyroid gland, with properties resembling those of iodothyroglobulin;  $C_{15}H_{11}O_4NI$

thyroid (thi'rōid) *n.* [Gk. *thyrsē* wand *eidos* form.] Resembling thyrsus in shape

thyrsus (thi'r'sos) *n.* [Gk. *thyrsos* wand.] A mixed inflorescence with main axis racemose, later axes cymose, with cluster almost double-cone shaped hypanth-bearing lateral chlamydosporous pappi.

thysanuriform (thi'sānūrifōrm) *n.* [Gk. *thysanēs* fringe *oura*, tail *L. forma*, form.] Campodeiform *appl.* a larva resembling Thysanura.

tibia (tib'iā) *n.* [L. *tibia*, shin.] Shinbone, inner and larger of leg-bones between knee and ankle fourth joint of insect and arachnid leg

tibial (tib'iāl) *n.* [L. *tibia* shin.] Part or in region of tibia.

tibial (tib'iāl) *n.* [L. *tibia* shin.] Embryonic structure partly represented by astragalus ossified bone in tendon of posterior tibial muscle.

tibiofibula (tib'iōfib'ulā) *n.* [L. *tibia*, shin *fibula*, buckle.] Bone formed of fused tibia and fibula.

tibiofibular (tib'iōfib'ulār) *n.* [L. *tibia* shin *fibula*, buckle.] Part tibia and fibula *appl.* articulation, syndesmosis part tibiofibula.

tibiotarsal (tib'iōtār'sāl) *n.* [L. *tibia*, shin Gk. *taraxos* sole of foot.] Part tibia and tarsus part or in region of tibiotarsus.

tibiotarsus (tib'iōtār'sūs) [L. *tibia* shin Gk. *taraxos* sole of foot.] Tibial bone to which proximal tarsals are fused, in birds.

tidal (tī'dāl) *n.* [A.S. *tid* time] Part tides bbing and flowing *appl.* air

volume of as normally inhaled and exhaled at each breath *appl.* wave main flow of blood during systole.

Tidman's vesicles [F. *Tiedemann* German anatomist]. Small rounded glandular chambered bodies at neck of Pollen vesicles racemose vesicles of Asteroides.

tige (tīgh tī) *n.* [F. *tige* stem.] Paturon, *q.v.* stem.

tigellum (tīg'el'um) *n.* [F. *Agelle* dim of *Age* stem.] The central embryonic axis, consisting of radicle and plumule

tigroid (tī'groid) *n.* [Gk. *Higroides* spotted.] *Appl.* granules or bodies, chromophil substance or Nissl granules of the neurocyton.

tigrolysis (tīgrōl'īsis) *n.* [Gk. *Higroides* spotted *lysis* loosening] Chromatolysis of tigroid granules

timbal (tīm'bāl) *n.* [F. *tombale* kettle drum.] Sound-producing organ in cicadas.

tiph phyte (tī'fōt) *n.* [Gk. *typhos* pool *phyton*, plant] Pond plant.

tissue (tī'sū, tīsh'ū) *n.* [F. *tissu* woven.] The fundamental structure of which animal and plant organs are composed an organization of like cells

tocopherol (tōkōf'ērōl) [Gk. *tokeō* birth *pheros* carry]

tocopherol vitamin E present wheat germ etc. anti-sterility vitamin  $C_{55}H_{105}O_7$

tokocytes (tōk'ōsīs) *n.* *phos* [Gk. *tokeō* offspring *kytos* hollow] Reproductive cells of sponges.

tokostome (tōk'ōstōm) *n.* [Gk. *tokeō* birth *stoma* mouth] Female genital aperture as in mites, etc.

t in toso (tūmēn'tōs) *n.* [L. *tomensum*, stuffing] Covered closely with matted hairs, as leaf.

t mantum (tūmēn'tūm) *n.* [L. *tomensum* stuffing] The closely matted hair on leaves or stems.

Tome fibres [SI / *Tomes* English dentist]. Dental fibres, processes of odontoblasts in dentinal tubules.

Tomes granular layer—a layer of interglobular spaces in dentine.



tomite (tómít) *n.* [Gk. *tomē* cutting *mitēs* thread.] Free-swimming non-feeding stage following protomit stage in life cycle of Holotricha.

tomium (tómíum) *n.* [Gk. *tomos* cutting] The sharp edge of a bird's beak.

t mont (tómōnt) *n.* [Gk. *tomē* cutting *onta*, beings.] Stage in life cycle of Holotricha when body divides, usually in a cyst.

tongue (tóng) *n.* [A.S. *tung* tongue.] An organ on floor of mouth, usually movable and protrusible; any tongue-like structure as radula, ligula, hypopharynx, in some insects lingua.

tonicity (tónh'ití) *n.* [Gk. *tonos* tension.] Normal ton or tens in tonus.

tonofibrillae (tō òfibril'ē) *n. plu.* [Gk. *tonos* tension L. *fibrilla* small fibre.] Epithetofibrillae *q.s.* regarded as skeletal or supporting structures rather than as myofibrillae supporting fibrils as of cilia.

toplast (tō'òpiást) *n.* [Gk. *tonos* tension *plastes* modelled.] A vacuolar membrane a plastid with distinct vacuole walls special form of vacuole-producing plastid.

tonotaxis (tónóták'sis) *n.* [Gk. *tonos* tension *taxis* arrangement] Response to change in density of surrounding medium.

tonal (tón ál) *n.* [L. *tonsilla* tonsil] One of aggregations of lymphoid tissue in pharynx or near tongue base.

t nail (tónál) *n.* [L. *tonsilla* tonsil.] A tonsil a rounded structure within rudus E. rudinalis or via of cerebellum.

tonus (tō ōs) [Gk. *tonos* tension.] Tonicity or condition of being slightly stretched as of muscles.

topaesthesia (tōp'èsthē'sia) *n.* [Gk. *topos* place *aisthēsis* sensation.] Appreciation of locus of a tactile sensation.

t pochemical (tōp'òkēm'ikál) *n.* [Gk. *topos* place *chemia*, transmutation.] Appl. sense the perception of odours; relation to track or place as in ants.

topodeme (tōp'òdēm) *n.* [Gk. *topos* place *demos* people.] Deme occupying a particular geographical area.

topotaxis (tōp'òták'sis) *n.* [Gk. *topos* place *taxis* arrangement.] Movement induced by spatial differences in stimulation intensity and orientation in relation to sources of stimuli as telotaxis, tropotaxis, menotaxis, mnemotaxis, *q.s.*; tropism.

topotype (tōp'òtíp) *n.* [Gk. *topos* place *typos* pattern.] A specimen from locality of original type.

torcular (tōr'kōlār) *n.* [L. *torcular* wine-press.] Occipital junction of venous sinuses of dura mater confluent sinuum torcular Herophil.

torma (tōr'mā) *n.* [Gk. *toros* socket.] A thickening at junction of labrum and clypeus.

tormogen (tōr'mōjēn) *n.* [Gk. *toros* socket *genes* producing] A cell secreting the socket of a bristle, in insects.

toraria (tōr'ārīā) *n.* [L. *torrens* to turn.] The free larval stage in development of Balanoglossida.

torote (tō tōt) *n.* [L. *torrens* to turn] With blunt extremities, as spicule.

torose (tō rōs) *n.* [L. *torrens* swelling] Having fleshy swellings knobbed.

torques (tōr-kwēz) *n.* [L. *torques* necklace.] A necklace like arrangement of fur feathers, or the like.

toralo (tōr'shūn) *n.* [L. *torquere* to twist] Spiral bending the twisting round of a gastropod body as it develops.

tortile na (tōr'tikōn) *n.* [L. *torquere* to twist *conus* cone] A turreted, spirally-twisted shell.

torula condition,—yeast-like isolated cells resulting from growth of blue mould conidia in saccharose solution.

**toruloid** (tôr'ûld) *n.* [*L. torulus* small swelling *Gk. clados* form.] *Appl.* structure plasmatodermis storage organ of zoosporangium *n.* in Peronosporales.

**torulose** (tôr'ûlse) *a.* [*L. torulus* small swelling] With small swellings beaded moniliform.

**torulus** (tôr'ûls) *n.* [*L. torulus* small swelling] The insect antenna insertion socket antennifer *g.s.*

**torus** (tôr'ûs) *n.* [*L. torus* swelling] Axis bearing floral leaves receptacle or thalamus; thickened centre of bordered pit membrane; firm prominence or marginal fold or ridge; ridge bearing uncini in Polychaeta pedicel in Diptera.

**totipalmate** (tôt'ipal'mât) *a.* [*L. totus* all *palmus*, palm of hand.] Having feet completely webbed *steganopoda*.

**totipotent** (tôt'ip'ôtênt) *a.* [*L. totus* all *potens* powerful] *Appl.* blastomeres which can develop into complete embryos when separated from aggregate of blastomeres *appl.* meristematic cells capable of specialization in response to hormones from growth centres totipotent.

**totospire** (tôk'spir) *n.* [*Gk. totos* bow; *L. spira* coil.] A spiral spike of rather more than one revolution.

**toxic** (tôk'sik) *a.* [*Gk. toxikon* poison.] *Part.* caused by or of the nature of poison poisonous.

**toxicity** (tôk'si'ti) *n.* [*Gk. toxikon* poison.] The nature of poison the virulence of poison or of poisonous agency.

**toxicology** (tôk'sik'ôl'ôj) *n.* [*Gk. toxikon*, poison *logos* discourse.] The science treating of poisons and their effects.

**toxiciferous** (tôk'si'fêrûs) *a.* [*Gk. toxikon* poison *L. ferre* to carry] Holding or carrying poison; toxicophorous.

**toxigeni** (tôk'si'jên'ik) *a.* [*Gk. toxos* poison *genesis* producing] Producing poison toxicogenic.

**toxin** (tôk'sin) *n.* [*Gk. toxikon* poison] Any poison derived from plant or animal phytotoxin or ootoxin.

**toxoid** (tôk'soid) *n.* [*Gk. toxikon*, poison *eidos* form.] A toxin deprived of its toxic but not of its antigenic capacity anatoxin.

**tox n** (tôk'sôn) *n.* [*Gk. toxos*, bow] A toxa or bow-shaped picule.

**toxophore** (tôk'sô'fôr) *n. ph.* [*Gk. toxikon* poison *phoros*, to carry] The poisoning qualities of toxin molecules / haptophores.

**trabant** (trâbânt) *n.* [*Ger Trabant* satellite.] Short chromosome segment constructed from the rest satellite, *g.s.*

**trabecula** (trâbêk'ûlû) *n. ph.* [*L. trabecula* little beam.] Plates of sterile cells extending across sporangium of pteridophytes row of cells bridging cavity two curved bars of cartilage embracing hypophysis cerebri of embryo; small fibrous bands forming imperfect septa or framework of organs.

**trabecular** (trâbêk'ûlâr) *a.* [*L. trabecula*, little beam.] *Part.* or of nature of trabecula, having cross-barred framework trabeculate.

**traba erebri**—corpus callosum.

**trace-el** *m. ts.*—elements occurring in minute quantities as natural constituents of living organisms or tissues, as Ag Cd, Co, Cu Fe, Li Mn, ■ Pb S V

**trac -el ments**—isotopes used for tracing chemical elements and compounds in living tissues tracers

**trachea** (trâk'ê'û, trâ'k'ê'û) *n.* [*L. trachea* windpipe] The windpipe; respiratory tubule of insects and other arthropods spiral or annular vascular tissue of plants wood-vessel.

**tracheal** (trâk'ê'ûl trâ'k'ê'ûl) *a.* [*L. trachea*, windpipe.] *Part.* resembling or having tracheas tracheate *appl.* tissue, as of xylem *appl.* ectodermal cavities opening into pneumatophore of certain Sipuncophora.

tracheal gills,—small wing-like respiratory outgrowths from the bottom of aquatic larvae of insects.  
tracheary—tracheal tracheate  
tracheate (trák'kêit) *n.* [L.L. *trachea* windpipe.] Having tracheae trachean.

tracheid (trák'êid) *n.* [L.L. *trachea* windpipe.] One of the cells with spiral thickening or bordered pits, conducting water and solutes, and forming woody tissue.

tracheidal cells,—pericycle cells resembling tracheids.

trachein (trák'êin) *n.* [L.L. *trachea* windpipe.] Colloid substance of tracheal air sacs contracting or expanding according to degree of moisture, in certain buoyant insect larvae.

trachealate (trák'êlât) *n.* [Gk. *tracheia* neck.] Narrowed as in neck formation.

trachel mastoid (trák'êlômâ'stoid) *n.* [Gk. *tracheia* neck *mastos* breast *eidos* form.] Part neck region and mastoid process *appl* muscle longissimus capitis.

tra ■ nchyma (trák'êng'kimâ) *n.* [L. *trachea* windpipe Gk. *enchyma* infusion.] Tracheal vascular tissue.

trache bronchial (trák'êb'rîng'kîl) *n.* [L. *trachea* windpipe Gk. *bronchos* bronchial tube.] *Appl* lymph-glands *appl* *synux* formed of lower end of trachea and upper bronchi.

tracheole (trák'êol) [L. *trachea* windpipe.] An ultimate branch of tracheal system.

tracheophyt (trák'êôfit) [L.L. *trachea* windpipe] Any vascular plant pteridophyt or a spermatophyte.

trachyglossate (trák'iglôs'êit) *n.* [Gk. *trachys* rough *glossa* tongue] With rasping or toothed tongue.

tract (trakt) [L. *trahere* to draw] A region or area or system considered as a whole as alimentary tract a band, bundle or system of nerve fibres.

tractellum (traktêl'ôm) *n.* [L. *tra-*

*here* to draw] A flagellum of forward end of Mastigophora, or of zoospores, with circumductory motion.

tragus (trâ'gûs) *n.* [Gk. *tragos* goat.] A small pointed eminence in front of concha of ear its hal.

tram (trâ'mâ trâmâ) *n.* [L. *trame* wool] A central core of interwoven hyphae of fungal gill or conidiophore.

transad (trân'sâd) *adv* [L. *trans* across *ad* to.] *Appl* organisms of the same or closely related species which have become separated by an environmental barrier as European and American reindeer.

transapical (trân'sâp'ikl) *n.* [L. *trans* across *apex* summit.] *Appl* transverse axis and plane of diatom alve.

transsect (trân'sêkt) *n.* [L. *trans* across *secare* to cut.] A line, strip or profile as of vegetation, chosen for study and charting.

transectio (trân'sêk'ishûn) *n.* [L. *trans* across *sectio* a cut.] Cross section section across longitudinal axis.

transformation (trân's'fôrâm'shûn) *n.* [L. *transformare* to change in shape.] Change of form, as in metamorphosis metabolism.

transfused tissue —tissue of gymnosperm leaves, consisting of parenchymatous and tracheidal cells.

transgeneration,—point mutation or rejuvenation.

transill nt (trân'sîl'înt) *n.* [L. *transilire* to leap over] *Appl* nerve fibres connecting brain convolutions not adjacent. *n.* A mutation.

translational (trân'sîl'hôdîl) *n.* [L. *transilire* to go across.] *Appl* epithelium occurring in ureters and urinary bladder renewing itself by mitotic division of third and innermost layer of cells.

translocation (trân's'lokâ'shûn) *n.* [L. *trans* across *locus* place] Removal to different place or habitat diffusion as of food material change in position of

- chromosome segment to another part of the same chromosome or of a different chromosome.
- translocation quotient,—ratio of chemical content of shoot to that of root, measure of mobility or relative translocation, *g* of manganese.
- transmedian (trānsmē'diān) *a.* [*L. trans* across *medius* middle.] *Part* or crossing the middle plane *appl* muscles.
- transmutation theory—theory that one species can evolve from another
- transpalatine (trānsplā'tāin) *n.* [*L. trans* across *palatus*, the palate.] A cranial bone of crocodiles, connecting pterygoid with jugal and maxilla.
- transpinal (trānsplā'nāl) *n.* [*L. trans* across *spina*, spine.] A muscle connecting transverse processes of vertebrae.
- transpirati *n* (trānsplī'rā'shūn) *n.* [*L. trans* across *spirare* to breathe.] Exhalation of vapour through pores or stomata.
- transplant (trānsplānt' trānsplānt') *n.* [*L. trans* across *placere* to plant.] *T* transfer tissue from one part to another part of the body of the same or that of another individual. (trāns plānt, trāns plānt) Tissue transferred to another part graft
- transpyloric plane,—upper of imaginary horizontal plane dividing abdomen into artificial regions.
- transudate (trānsūd dāt) *n.* [*L. trans* beyond *sudare*, to sweat] Any substance which has oozed through membrane or pores.
- transversal (trānsvē'r'sāl) *a.* [*L. transversus* across.] Lying across or between, as transversal wall.
- transverse (trānsvē'r's) *a.* [*L. transversus* across.] Lying across or between, as artery, colon, ligament, process heterotropous.
- transverse *m* (trānsvē'r'sim) *n.* [*L. transversus* across.] In most reptiles, cranial bone extending from pterygoid to maxilla.

- transversus (trānsvē'r'sis) *n.* [*L. transversus* across.] A transverse muscle as of abdomen, thorax, pinna, tongue foot, pennacum.
- trapeziform (trāpē'zifōrm) *a.* [*Gk. trapezion* small table; *L. forma* shape.] Trapezium-shaped.
- trapez *m* (trāpē'zīm) *n.* [*Gk. trapezion* small table.] The first carpal bone, at base of first meta carpal greater multangular bone portion of pons Varoli.
- trapezias (trāpē'zīs) *n.* [*Gk. trapezion* small table.] A broad, flat, triangular muscle of neck and shoulders.
- trapezoid (trāpē'zoid, trāpē'zoid) *a.* [*Gk. trapezion* small table *oides* form.] Trapezium-shaped *appl* ligament, ucleus, ridge. *n.* Lesser multangular bone.
- traumat (trōmāt'ik) *a.* [*Gk. trauma*, wound.] *Part* caused by a wound or other injury
- tra metia (trō mātīn) *n.* [*Gk. trauma* wound] Substance occurring in injured plant cells, which is capable of causing uninjured cells to divide; wound hormone;  $C_{12}H_{15}O_N$
- traumatostasy (trō mātōstās'ī) *n.* [*Gk. trauma*, wound *stasis* close pressed.] Curvature response to stimulus of wounding
- traumatotropi (trō mātōtrōp'ik) [*Gk. trauma*, wound *trope* turning] *Appl* curvature of plant organ in response to wounding influence traumatropic.
- traumatoplasm (trōmāt rōplāz) *n.* [*Gk. trauma*, wound *trope* turn.] Curving of plant parts in response to wounds.
- traumatoma (trō mōtōm'ā) *n.* [*Gk. trauma*, wound *stasis* arrangement.] Reaction after wounding as in nuclei and protoplasts.
- tr foli (trē'fōlī) *n.* [*L. trifolius* three-leaved] Flower or leaf with three lobes.
- tr melloid (trēm'fōld) *a.* [*L. tremere* to tremble.] Gelatinous in substance or appearance.

trophocyte (tréf'óit) *n.* [Gk. *trophos* to nourish *kytos* hollow] A cell nourishing adjacent cells  
 nurse cell sustentacular cell.  
 trophones (tréf'ón) *n. pl.* [Gk. *trophos* to nourish.] Nutritive substances formed on breaking down of cells and which stimulate cell-division.  
 triactinal (tríf'ík tñál) *n.* [Gk. *trias* three *aktis* ray] Three-rayed.  
 triadelphous (tríf'ádél'fús) *n.* [Gk. *trias* three *adelphos* brother] Having stamens united by their filaments into three bundles.  
 triasene (tríf'én) *n.* [Gk. *trias* three *dent*.] A somewhat trident-shaped spine.  
 triandrous (tríf'án drós) *n.* [Gk. *trias* three *andros* man.] Having three stamens.  
 triangle (tríf'ángl) *n.* [L. *triangulus* three-sided] A three-sided structure or area.  
 triangularis (tríf'ángulá rís) [L. *triangulus* three-cornered] Muscle from mandible to lower lip which pulls down corner of mouth depressor anguli oris muscle and tendinous fibres between dorsal surface of sternum and costal cartilages transverse thoracis which assists expiration.  
 trianthous (tríf'án thós) *n.* [Gk. *trias* three *anthos* flower] Having three flowers.  
 triar (tríf'árik) *n.* [Gk. *trias* three *arkhe* beginning] Having three xylem bundles uniting to form the woody tissue of root.  
 triarticulat (tríf'árik úlút) *n.* [L. *trias* three *articulus* joint.] Three-jointed.  
 Triassic (tríf'áísk) [Gk. *trias* three] *App.* the early period of the Mesozoic era.  
 triast (tríf'áíst) *n.* [Gk. *trias* three *aster* star] Three chromatin masses resulting from tripolar mitosis as in cancer cells.  
 triaxon (tríf'áksón) *n.* [Gk. *trias* three *axis* axis] A sponge pecule with three axes.

tribe (tríf) *n.* [L. *tribus* tribe.] In classification, subdivision of a family and differing in minor characters from other tribes.  
 triboluminis ac nes (tríf'ólóómínís éns) *n.* [Gk. *tribein* to rub L. *luminosus* to grow light.] Luminescence produced by friction.  
 tribrastrate (tríf'rák'téstr) *n.* [L. *tres* three *bractes* thin plat of metal.] With three bracts.  
 trica (tríf'ík) *n.* [F. *tricolor* to knit.] A lichen apothecium with ridged spherical surface.  
 tricarpellary (tríf'íkér péllári) *n.* [Gk. *trias* three *karpos* fruit.] With three carpels.  
 tricertric (tríf'én trík) *n.* [Gk. *trias* three *centron* centre.] Having three centromeres *app.* chromosomes.  
 triceps (tríf'éps) *n.* [L. *tres* three *caput* head.] *App.* a muscle with three heads or insertions.  
 trichidium (tríf'íkíd'ím) *n.* [Gk. *thrix* hair *idion* dim.] A sterigma.  
 trichillum (tríf'íkíl'ím) *n.* [Gk. *thrix* hair *ile* crowd.] A pad of matted hairs at base of certain leaf petioles.  
 trichites (tríf'ík'íta) *n. pl.* [Gk. *thrix* hair] Fine rod like structures found in oral basket of certain infusoria silicious spicules in certain sponges hypothetical amylose crystals constituting a starch granule.  
 trichoblast (tríf'óbíás) *n.* [Gk. *thrix* hair *blastos* bud.] A cell of plant pidermis which develops into root hair.  
 trichobothrium (tríf'óbóth ríóm) *n.* [Gk. *thrix* hair *bothros* pit.] A conical protuberance with sense-hair on each side of anal segment in certain myriopods a vibratory sense-hair or setula in spiders.  
 trichocarpous (tríf'ókár'pós) *n.* [Gk. *thrix* hair *karpos* fruit.] With hairy fruits.  
 trichocyst (tríf'ókíst) *n.* [Gk. *thrix* hair *kystis* bladder] An oval or spindle-shaped protrusible body found in ectoplasm of infusoria.

trichodragmata (trik'ðræg'mătă) *n*. [*Gk. thrix* hair *dragma* sheaf.] Straight, fine hair like spicules in bundles.

trichogen (trik'ðjén) *n*. [*Gk. thrix* hair, *gennē* producing.] A hair or bristle-producing cell, in insects.

trichogyn (trik'ðjyn) *n*. [*Gk. thrix* hair *gynē* woman.] An elongated hair-like receptive cell at end of carpogonium of *Thallophyta*.

trichoid (trik'oid) *a*. [*Gk. thrix* hair; *eidēs* form.] Hair-like; *appl* type of tactile sensilla in insects.

trichome (trik'ôm) *n*. [*Gk. trichomena*, growth of hair.] An outgrowth of plant epidermis, either hairs or scales a hair tuft filamentous thallus trichoma.

trichophor (trik'ðfôr) *n*. [*Gk. thrix* hair, *phorō* to bear.] A group of cells bearing trichogynes; chaetogenous sac of annelids.

trichosiderin (trik'ðsidērīn) *n*. [*Gk. thrix* hair *sidēros* iron.] Iron-containing red pigment isolated from human red hair.

trichosis (trik'ôsis) *n*. [*Gk. thrix* hair.] Distribution of hair; abnormal hair growth.

trichothallic (trik'ðthăl'ik) *a*. [*Gk. thrix* hair *thallos* young shoot.] Having filamentous thallus, as certain algae *appl* growth of filament by division of intercalary meristematic cells.

trichotomous (trik'ðtômūs) *a*. [*Gk. thricks* threefold *temnō* cutting.] Divided into three branches.

trichrol (trik'rô'lik) *a*. [*Gk. tris* three *chroma*, colour.] Showing three different colours when seen in three different aspects.

trichromatic (trik'rômăt'ik) *a*. [*Gk. tris*, three *chroma* colour.] Able to perceive the three primary colours trichromic.

tricipital (trik'ip'hăl) *a*. [*L. tris* three *caput* head.] Having three heads or insertions, as triceps.

tricoceous (trik'ôk'ô) [*Gk. tris* three *kokkos* kernel.] *Appl.* three-carpel fruit.

triconodont (trik'ô'nôdônt) *a*. [*Gk. tris* three *konos* cone; *odous* tooth.] *Appl* tooth with three crown prominences in line parallel to jaw axis.

tricostrate (trik'ô'stăt) *a*. [*L. tris* three *costa* rib.] With three ribs.

tricotyledonous (trik'ôtils'dônūs) *a*. [*Gk. tris* three; *kotyledon* cup-like hollow.] With three cotyledons.

tricrotic (trik'rô'tik) *a*. [*Gk. tris* three *trochein* to beat.] Having tripl beat in the arterial pulse.

tricerural (trik'rôor'al) *a*. [*L. tris* three; *crus* leg.] With three branches.

tricuspid (trik'ûs'pid) *a*. [*L. tris* three *capitis* point.] Three-pointed *appl* triangular valve of heart.

tricuspidat (trik'ûs'pidăt) *a*. [*L. tris* three *capitis* point.] Having three points *appl* leaf.

tridactyl (tridăk'til) *a*. [*Gk. tris*, three *daktylos* finger.] Having three digits.

tridentat (tridên'tăt) *a*. [*L. tris* three *dens* three-pronged.] Having three tooth-like divisions.

tridynamous (tridîn'dinūs) *a*. [*Gk. tris* three *dynamis* power.] With three long and three short stamens.

trifacial (trifă'şăl) *a*. [*L. tris* three *facies* face.] *Appl* fifth cranial nerve the trigeminal.

trifarious (trifă'riūs) *a*. [*L. trifarius* of three sorts.] In groups of three of three kinds in three rows having three surfaces.

trifid (trif'id) *a*. [*L. trifidus* three forked.] Cleft to form three lobes.

triflagellat (trifă'flăt) *a*. [*L. tris* three *flagellum*, whip.] Having three flagella.

trifoliate (trifô'liăt) *a*. [*L. tris* three *folium*, leaf.] Having three leaves growing from same point.

trifoliolate (trifô'hôliăt) *a*. [*L. tris* three *dim* of *folium* leaf.] With three leaflets growing from same point.

trifurcate (trif'kāt) *n*. [*L. tri* *furcatus* three-forked.] With three forks or branches.

trigamma (trigāmā) *n*. [*Gk. tria* three *γ gamma*.] Three-pronged forked wing venation in Lepidoptera.

trigamous (trigāmūs) *n*. [*Gk. tria* three *gamos* marriage.] *Appl.* flower-head with staminate pistillate and hermaphrodite flowers.

trigeminal (trijēm'ināl) *n*. [*L. tri* *geminus* triplet.] Consisting of or *part.* three structures *appl.* fifth cranial nerve, with ophthalmic, maxillary and mandibular divisions *appl.* arrangement of pairs of pores in three rows in ambulacra of some echinoids.

trigenari (trijēn'ārī) [*L. tres* three *genus* race.] *Part.* or derived from three genera *appl.* hybrids.

trigeni (trijēn'ī) *n*. [*Gk. tria* three *genos* descent.] *Part.* or controlled by three genes.

trigon (trigōn) *n*. [*Gk. tria*, three *gonia* angle.] Triangle of cusps of upper jaw molar teeth.

trigonal (trigōnāl) *n*. [*Gk. trigonon* triangular.] Ternary or triangular when *appl.* symmetry with three parts to a whorl *appl.* three-sided stems.

trigone (trigōn) [*Gk. trigonon* triangle.] Also trigonum,—a small triangular space as olfactory trigone trigonum vesicae etc.

trigonal (trigōnāl) *n*. [*Gk. trigonon* triangle.] Triangle of cusps of lower molar teeth.

trigyna (trij'nās) *n*. [*Gk. tria* three *gynē* woman.] Having three styles.

trih : oxygot (trihēt rōz'gōt) [*Gk. tria* three *heteros* other *synus* yoked together.] A *rgan* *nm* heterozygous *f* three genes.

trijugate (trijūgāt) *n*. [*L. tres* three *jugum* yoke.] Having three pairs of leaflets.

trilabiate (trilā'bīāt) [*L. tres* three *labrum* lip.] With three lips.

trilacunar (trilākō'nār) *n*. [*L. tres* three *lacuna* cavity.] With three lacunae having three leaf gaps *appl.* nodes.

trilobate (trilō'bāt) *n*. [*Gk. tria* three; *lobos* lobe.] Three-lobed.

trilocular (trilōk'ulār) *n*. [*L. tres* three *loculus* compartment.] Having three cells or loculi.

trilophodont (trilōf'ōdōnt) *n*. [*Gk. tria* three *lophos* crest *odous* tooth.] Having three-crested teeth.

trilophous (trilō'fūs) *n*. [*Gk. tria* three *lophos* crest.] *Appl.* rayed spicule with three rays branched or ridged.

trimerous (trimērūs) *n*. [*Gk. tria*, three *meros* part.] Composed of three or multiples of three as parts of flower.

trimonoecious (trimōnē'siūs) *n*. [*Gk. tria* three *monos* alone *oikos* house.] With male female, and hermaphrodite flowers on the same plant.

trimorphism (trimōr'fizm) *n*. [*Gk. tria* three *morphe* form.] Occurrence of three distinct forms or forms of organs in one life-cycle or in one species *trimorphous* condition.

trinervate (tridēr'vāt) *n*. [*L. tres*, three *nervus* sinew.] Having three veins or ribs running from base to margin of leaf.

trinomial (trinō'mīāl) *n*. [*L. tres* three *nomen* name.] *Appl.* names consisting of three terms *f* binomial.

trioecious (triē'siūs) *n*. [*Gk. tria* three *oikos* house.] Producing male female and hermaphrodite forms on different plants *trioicous*.

trionaeum (triōs'ēm) *n*. [*L. tria* three *osae* bones.] *Appl.* foramen the opening between coracoid, clavicle and scapula.

triovulate (tridv'ulāt) *n*. [*L. tres*, three *ovum* egg.] Having three ovules.

tripartite (tripār'tīt, trip'ārīt) *n*. [*L. tria* three *partitus* separated.] Divided into three lobes, as a leaf.

tripetalous (trɪpɛtəlɪs) [Gk. *tris* three *petalon* leaf.] Having three petals.

tripinnate (trɪpɪnˈæt) *a.* [L. *tres* three *pinnæ*, feather] Thrice pinnate divided pinnately three times.

tripinnatifid (trɪpɪnətɪˈfɪd) *a.* [L. *tres* three; *pinnæ* feather *fīder* to cleave.] Divided three times in a pinnatifid manner.

tripinnatisect (trɪpɪnətɪˈsɛkt) *a.* [L. *tres* three; *pinnæ*, feather; *secare* to cut.] Thrice pinnatisect; three times lobed with divisions nearly to midrib.

triplochoid, — *see* diademoid.

triple-nerved, — *apfl* leaf with three prominent veins.

triplex (trɪpˈlɛks) *a.* [L. *triplex* three-fold.] Having three dominant genes in polyploidy.

triplicate (trɪpˈlɪkət) *a.* [L. *triplex* tripl; *caula*, rib] Having three ribs.

triploblastic (trɪpˈlɒblɪk) *a.* [Gk. *triplos* tripl *blastos* bud.] With three primary germinal layers, epiblast, mesoblast, hypoblast.

triplocaulous (trɪpˈlɒkəʊs) *a.* [L. *triplex* triple *caulis* stalk.] Having axes of the third order.

triploid (trɪpˈlɔɪd) *a.* [Gk. *triploos* threefold.] With treble the normal number of gametic chromosomes. *n.* An organism with three haploid chromosome sets.

triploetichous (trɪpˈlɔɪtɪkəs) *a.* [Gk. *triploos* threefold *stichos* row] Arranged in three rows, as of cortical cells on small branches of *Chara* *apfl* eyes with preretinal and postretinal layers, as of larval scorpion.

tripod (trɪˈpɒd) *n.* [Gk. *tris*, three *podas* foot.] A tripod-shaped or three-legged specula.

tripolar (trɪpˈɒlɜː) *a.* [Gk. *tris* three *polos* axis.] *Apfl* division of chromatin to three poles in diseased cells instead of normal two poles, in mitosis.

tripton (trɪpˈtɒn) *n.* [Gk. *triplos* pounded.] Non-living santon *g*.

tripus (trɪpəs) *n.* [L. *tripus* tripod.] Posterior Weberian ossicle, adjoining air bladder trifurcation of coeliac artery into left coronary gastric, hepatic, and splenic arteries, tripus Haller.

triquetrous (trɪkwɛtˈrʊs) *a.* [L. *tri* *quater* three *cornus*.] *Apfl* stem with three angles and three concave faces *apfl* three-cornered or wedge-shaped bone.

triquetrum (trɪkwɛtˈrʊm) *n.* [L. *tri* *quater*, triangle.] The cuneiform carpal bone triquetral or Wormian bone.

triquiset (trɪkwɛtˈnɪt) *a.* [L. *tres* three *quasi*, five each.] Divided into three, with each lobe again divided into five.

triradial (trɪrɪˈdɪəl) *a.* [L. *tres* three *radius* ray] Having three branches as radii from one centre triradial *apfl* orbital sulcus.

trisepalous (trɪsɛpəlɪs) *a.* [Gk. *tris*, three *F* *sepalos* sepal.] Having three sepals.

triseptat (trɪsɛpˈtɪt) *a.* [L. *tres* three *septum*, partition.] Having three partitions or septa.

triseriate (trɪsɛˈrɪət) *a.* [L. *tres* three *series* row] Arranged in three rows trifarious having three whorls.

trisoous (trɪsəʊs) *a.* [Gk. *tris* three *soos*, body] *Part.* or having three homologous chromosomes.

trisporeous (trɪspəˈrʊs) *a.* [Gk. *tris*, three *spheros* seed.] Having three spores trispore.

tristachyous (trɪstɪkˈɪəs) *a.* [Gk. *tris*, three *stachys* ear of corn.] With three spikes.

tristichous (trɪstɪkˈɪəs) *a.* [Gk. *tris*, three *stichos* row] Arranged in three vertical rows.

tristyly (trɪstɪˈlɪ) [Gk. *tris*, three *stylos* pillar] The condition of having short, medium-length and long styles.

tritemate (trɪtɛmˈnɪt) *a.* [L. *tres* three *terni* three each.] Thrice ternately divided.



tribial (trīb'īal) *n.* [*L. tres* three *shin*.] Compound ankle-bone formed when centrale unites with talus.

tritoblasts (trī'ōblasts) *n. plu* [*Gk. trites* third *blastos* bud] A generation of Neosporidia produced by deutoblasts and in turn giving rise to teloblasts.

tritocerebrum (trī'ōsēr'ēbrūm) *n.* [*Gk. trites* third *L. cerebrum* brain.] Third lobe of insect brain indicated during development part of brain of higher Crustacea, consisting of antennal nerve centres also tritocerebron.

tritocone (trī'ōkōn) *n.* [*Gk. trites* third *konos* cone.] Premolar cusp.

tritor (trī'tōr) *n.* [*L. tritor* grinder]

Grinding surface of a tooth.

tritoxoid (trī'tōz'ōid) *n.* [*Gk. trites* third *zōon* animal *oides* form]

A roset of third generation.

tritubercular (trī'ōbēr'kūlār) *n.* [*L. tres* three *tuberculum*, small bump.] *Appl* molar teeth with three cusps tritupid

trituberculy (trī'ōbēr'kūll) *n.* [*L. tres* three *tuberculum* small bump.]

Theory of molar tooth development.

triungulin (trī'ōng'gūlin) *n.* [*L. tres* three *ungula* claw] Small six legged larva of Strepsiptera and Cantharida triungulus.

trivalent (trī'ālēt) [*L. tres* three *valer* to be strong]

A combination of three bromocanes held together by chiasmata between diplotes and metaphase of first division in meiosis. *Appl* amboceptor which can bind three different complements.

trivium (trī'vūm) *n.* [*L. trivium* cross-road] The three rays of starfish farthest from madrepost *f* bivariate

trixole (trī'ō'k) *n.* [*Gk. tria*, three *zōon* animal] *Appl* protozoan spore containing three sporozoites.

trochal (trō'kāl) *n.* [*Gk. trochos* wheel.] Wheel-shaped *appl* anterior disc of Rotifera.

trochant r (trōkāl'tēr) [*Gk. trochanter* runner] *Appl* processes

r prominences t upper end of thigh-bone—greater (major) lesser (minor) and third (tertius) small segment of leg between coxa and femur in insects and spiders.

trochanteric fossa,—a deep depression on medial surface of neck of femur

trochantin (trōkāl'n'tin) *n.* [*Gk. trochanter* runner] A small sclerite t base of coxa of insect leg sclerite for articulation of mandible in Orthoptera lesser trochanter

trochate (trōk'āt) *n.* [*Gk. trochos* wheel.] Having a wheel-like structure wheel-shaped trochiferous, trochiform.

trochite (trō'kīt) *n.* [*Gk. trochos* wheel] Segment or joint of stem of Crinoides.

trochlea (trōk'lēa) *n.* [*Gk. trochlis* pulley] A pulley-like structure through which a tendon passes, as of humerus, femur orbit.

trochlear (trōk'lēār) *n.* [*Gk. trochlis* pulley] Shaped like a pulley *plur* trochlea *appl* nerve, pathetic or fourth cranial nerve to superior oblique muscle of eye.

trochoblasts (trōk'ōblasts) *n. plu* [*Gk. trochos* wheel *blastos* bud.] Portions of segmenting egg destined to become prototroch of trochophore

trochoid (trō'kōid) *n.* [*Gk. trochos* wheel *oides* form.] Wheel-shaped capable of rotating motion, as pivot joint

trochophore (trōk'ōf) trochosphere (trōk'ōf) *n.* [*Gk. trochos* wheel *sphaira* globe] Free-swimming pelagic larval stage of many worms and some molluscs.

trochus (t'ōk'ōs) *n.* [*Gk. trochos* wheel] Inner anterior coarser ciliary zone of rotifer disc of cingulum.

tropaeic (trōp'ēik) *n.* [*Gk. trophē* keel] keel-shaped cariniform.

trophallaxis (trōfāl'āksis) *n.* [*Gk. trophē* nourishment *alaxis* interchange] Interchange of food between larvae and maginae in certain insects reciprocal feeding

trophammon (trófám mōn) *n.* [Gk. *trophē* nourishment *ammon*, fetal membrane.] Sheath round developing egg of some insects and passing nourishment to the embryo.

trophoderm (trófók'ródērm) *n.* [Gk. *trophē* nourishment; *ektēs* outside *derma*, skin.] Outer layer of mammalian blastocyst; trophoblast, *q.v.*

trophil (trófil) *n. pl.* [Gk. *trophē* nourishment.] Hard chitinous chewing organs of rotifers mouth-parts of insects; mandibles and mandibles collectively

trophil (trófil) *a.* [Gk. *trophē* nourishment.] *Peri* or connected with, nutrition, *appl.* nerves stimuli enlargement, etc. *appl.* uterus trophocentrus, *q.v.*

trophidium (trófid'ium) *n.* [Gk. *trophē* brood *idion dion*] The first larval stage of certain ants.

trophifer trophiger (tróf'fēr -jēr) *n.* [Gk. *trophē* nourishment *L. ferre* gerere to carry] Postero-lateral region of insect head with which mouth-parts articulate.

trophoblast (tróf'óblist) *n.* [Gk. *trophē* nourishment *blastos* bud.] The outer layer of cells of epiblast, or of morula; trophoderm, *q.v.*

trophochromatid (tróf'ókro'mátid) *n.* [Gk. *trophē* nourishment *chroma*, colour.] Vegetative chromatin, or that which regulates metabolism and functions of idiobromatid.

trophochrome (tróf'ókro'm) *a.* [Gk. *trophē* nourishment, *chroma*, colour.] *Appl.* cells with secretory granules giving staining reaction for mucous mucoserous mucosalbomins.

trophochromidia (tróf'ókro'm'id'ia) *n. pl.* [Gk. *trophē* nourishment *chroma*, colour] Vegetative chromidia; cf. idiobromidia.

trophocytes (tróf'ósts) *n. pl.* [Gk. *trophē* nourishment; *kyōs* hollow] Fat-cells used as food in insect development.

trophoderm (tróf'ódērm) *n.* [Gk. *trophē* nourishment *derma* skin.]

Outer layer of chorion, trophectoderm with a mesodermal cell layer

trophodisc (tróf'ódísk) *n.* [Gk. *trophē* nourishment *diskos* plate.] Female gonophore of certain Hydromedusae.

trophogone (tróf'ógō'ne) *n.* [Gk. *trophē* nourishment *gonē* seed.] A nutritive organ in Ascomycetes considered as an antheridium which has lost its normal function.

trophology (tróf'ól'óg) *n.* [Gk. *trophē* nourishment *logos* discourse.] The science of nutrition.

trophonema (tróf'ónē'má) *n. pl.* [Gk. *trophē* nourishment *nema* thread.] Uterine villi or hair-like projections which transfer nourishment to embryo through spiracles of elasmobranchs villi.

troph t (tróf'ót) *n.* [Gk. *trophē* to feed *on* being] Growth stage in Holotricha.

trophonucleus (tróf'ón'klē'tis) *n.* [Gk. *trophē* nourishment *L. nucleus* kernel.] Larger nucleus of binuclear protozoa, regulating metabolism and growth macro-nucleus, meganucleus of kinetocytus.

trophophore (tróf'ófōr) *n.* [Gk. *trophē* nourishment *phorē*, to bear] In sponges, an internal bud or group of cells destined to become gemmule.

trophoplasm (tróf'ópil'asm) *n.* [Gk. *trophē* nourishment *plasma*, mould.] Vegetative or nutritive part of cell *opp.* karyoplasm of cytoplasm.

trophoplast (tróf'ópil'ast) *n.* [Gk. *trophē* nourishment *plastēs* moulded.] A cell, nucleated or not plastid.

trophosome (tróf'ósōm) *n.* [Gk. *trophē* nourishment; *sōma*, body] The nutritive polypoid persons of hydroid colony

trophospongia (tróf'óspon'gia) *n.* [Gk. *trophē* nourishment *spongia*, sponge.] Spongy vascular layer of mucous membrane between uterine wall and trophoblast.

**trophospongium** (tróf'espôn'jilum) *n.* [Gk. *trophē* nourishment *spongion* sponge.] Canalisation of nerve cells, canaliculi occupied by branching processes of neuroglia cells.

**trophotaxis** (tróf'ótik'sis) *n.* [Gk. *trophē* nourishment *taxis* arrangement.] Response to stimulation by an agent which may serve as food.

**trophothylax** (tróf'óthylaks) *n.* [Gk. *trophē* nourishment *thylax* sack.] Food-pocket on first abdominal segment of certain ant. larvae.

**trophotropism** (tróf'ótropizm) *n.* [Gk. *trophē* nourishment *tropē* turn.] Tendency of an organism to turn towards a food supply.

**trophozoite** (tróf'ozóit) *n.* [Gk. *trophē* nourishment *zōon* animal.] The adult stage of a sporozoan.

**trophozooid** (tróf'ozóoid) *n.* [Gk. *trophē* nourishment *zōon* animal *oides* form.] A nutritive zooid of free-swimming tunicate colonies.

**tropibasic** (trópibásik) *a.* [Gk. *tropē* turn *basis* base.] *Appl.* choanodermium with small hypophyseal fenestra and common trabecula of pleribasic.

**tr pl** (tróp'lik) *a.* [Gk. *tropē* turn.] *Part tropism* *appl.* movement or curvature in response to a directional or uniaxial stimulus.

**tropine** (tróp'pī) *n.* [Gk. *tropē* turn.] Opium.

**tropism** (tróp'izm) *n.* [Gk. *tropē* turn.] Tendency of an organism to react in a certain way to certain kind of stimulus. tendency to move toward (positive) or away from (negative) the source of stimulus. growth curvature movement movement in response to stimuli, in sessile animals of taxis.

**trophophyte** (tróp'fít) *n.* [Gk. *trophē* turn *phytōn* plant.] A changing plant, or one which is more or less hygrophilous in summer and xerophilous in winter a plant growing in the tropics.

**tropotaxis** (tróp'ótik'sis) *n.* [Gk. *tropē* turn *taxis* arrangement.] Movement leading to equal stimulation of symmetrically placed sense organs symmetrical orientation.

**tru ribs**—ribs which are directly connected with sternum.

**trumpet hyphae**—elongated cells with enlarged ends in contact with those of adjoining cells, and comparable to sieve tubes, as in medulla of thallus in Laminaria.

**truncate** (trúng'kát) *a.* [L. *truncatus* cut off.] Terminating abruptly as if tapering end were cut off.

**truncus art. riosus**,—most anterior region of amphibian or foetal, heart, through which blood is driven from ventricle.

**trunk** (trúng'k) *n.* [Fr. *tronc* from *truncus* stem of tree.] Main stem of tree body exclusive of head and extremities main stem of vessel or nerve truncus proboscis of elephant.

**trunk legs**,—peritopods of decapods, thoracic locomotory legs.

**tryma** (trí'má) *n.* [Gk. *trymē* hole.] A drupe with separable rind and two-valved endocarp with spurious dissepiments as walnut.

**trypanosome** (tríp'ándmón'ád) *n.* [Gk. *trypanon*, ugr. *trypan* unit.] *Appl.* phase in development of trypanosome while in its invertebrate host crithidial.

**trypanorhynchus** (tríp'ándring'kós) *n.* [Gk. *trypanon* ugr. *trypan* *rhynchus* snout.] A spiniferous protrusible proboscis accompanying each phyllidium in certain Ctenoidea.

**trypsin** (tríp'sin) *n.* [Gk. *trypsis* to rub down *psalis* digesting.] Proteolytic enzyme of pancreatic juice; similar enzyme of various plants and animals.

trypsinogen (trips'jén) *n* [Gk. *trypsin*, to rub down *pepsis* digesting *-genus* producing] *S* substance secreted by cells of pancreas converted into trypsin by enterokinase of succus entericus.

tryptic (trips'tik) *a*. [Gk. *trypsin* to rub down *pepsis* digesting] Produced by or *pert.* trypsin.

tryptophane (trips'tófan) *n* [Gk. *trypsin*, to rub down *pepsis* digesting *phainein*, to appear] An amino-acid derivative elaborated in plants and essential for nutrition of animals  $C_{11}H_{12}O_2N_2$ .

tuba (tú'bá) *n*. [L. *tuba* trumpet.] A salpinx or tube as tube acustica or auditive, the Eustachian tube tube uterina, Fallopian tube.

tuber (tú'bár) *a*. [L. *tubus* pipe.] Consisting of an arrangement of tubes or forming a tube, as *appl.* system and skeleton in sponges.

tubate (tú'bát) *a*. [L. *tubus* pipe.] T be-shaped, tubular tubiform.

tube (túb) *n*. [L. *tubus* pipe.] Any tubular structure cylindrical structure, as protective enveloping case of many animals mollusc siphon.

tuber (tú'bér) *n*. [L. *tuber* knob.] Thickened fleshy underground stem with surface buds rounded protuberance.

tuber of eye *m*.—hollow protuberance of grey matter between optic chiasma and corpora mamillaria (hypothalamus tuber anterior).

tuberc (tú'bérk) *n*. [L. *tuber culum*, small hump.] A small rounded protuberance root swelling or nodule bulbil rib-knob cusp tuberculum.

tubercuiat (túbér'kúliat) *a*. [L. *tuberculum*, small hump] *Pert.* resembling, or having tubercles.

tuberculous (túbér'kúliús) *a*. [L. *tuberculum* small hump.] Having many tubercles.

tuberiferous (tú'bérif'érús) *a*. [L. *tuber* hump; *ferre* to bear] Bearing or producing tubers.

tuberiform (tú'bérifórm) *a*. [L. *tuber* hump *forma* shape.] Resembling or shaped like tuber tuberoid.

tuberosity (tú'bérós'ití) *n*. [L. *tuber* hump] Rounded eminence on bone as for muscle attachment.

tuberous (tú'bérús) *a*. [L. *tuber* hump.] Covered with or having many tubers tuberosae.

tub-tonall,—adenoid tissue near pharyngeal opening of Eustachian tube.

tubicolous (túbik'ólús) *a*. [L. *tubus* tube *coler* to inhabit.] Inhabiting a tube.

tubicorn (túbik'órns) *a*. [L. *tubus* tube *cornu* horn.] With hollow horns.

tubifacient (túbífíf'áshént) *a*. [L. *tubus* tube *facere* making] Tube making as some worms.

tubilingual (túbíling'gwál) *a*. [L. *tubus* tube *lingua*, tongue.] Having tubular tongue adapted for sucking.

tubiparous (túbip'árús) *a*. [L. *tubus* tube *parere* to beget.] Secreting tube-forming maternal *appl.* glands.

tubo-ovarian (túb'óvárí'án) *a*. [L. *tubus* pipe *ovarium* ovary] Of or *pert.* oviduct and ovary.

tubotympani (túbótimpán'ik) *a*. [L. *tubus* pipe *tympanum*, drum.] *Appl.* recess between first and third visceral arches, from which are derived the tympanic cavity and Eustachian tube.

tubuliat (túbúliat) *a*. [L. *tubulus* small tube.] T bliform tubular tubuliferous.

tubul (túbú) [L. *tubulus* small tube.] Any small hollow cylindrical structure tubulus.

tubuliferous (túbúlif'érús) *a*. [L. *tubulus* small tube *ferre* to carry] Having tubule.

tubuliflorous (túbúlíf'lóús) *a*. [L. *tubulus* small tube *flor* flower] Having florets with tubular corolla.

tubuliform (túbúlífórm) *a*. [L. *tubulus* small tube; *forma*, shape.] Tube-shaped *appl.* certain spanning glands.

tubuli contorti,—the convoluted seminiferous tubules.

tubuli recti,—straight tubules connecting seminiferous tubules and rete testis.

tubulose (tū'būləs) *a.* [*L. tubulus* small tube.] Having or composed of tubular structures, as an aster head a tubipore coral hollow and cylindrical.

tubulus (tū'būlus) *n.* [*L. tubulus* small tube.] A hymenial pore cylindrical ovipositor *a.* tubule. *Plu* Any small tubular structures, as tubuliferi recti seminal ferri

tundra (toon'drə) *n.* [*Russ.*] Treeless region with permanently frozen subsoil.

tunic (tūn'ik) tunica (tū'nīkə) *n.* [*L. tunica, coating*] An investing membrane or tissue as those of bulbs eye kidney ovary testes arteries et

tunica ibuginea.—see albuginea.

tunicate (tū'nīkət) *a.* [*L. tunica, coating*] Provided with a tunic or test *appl.* bulbs with numerous concentric broad layers enveloped in tough test or mantle. *n.* A sea-squid or other form of Urochorda.

tunicin (tū'nīn) *n.* [*L. tunica, coating*] A substance related to cellulose in tunic of ascidian main animal cellulose

tunicle (tū'nīkl) *n.* [*L. tunica* little coat.] A natural covering integument.

tunnel *f.* Corti [*A Corti* Italian histologist.] Triangular tunnel enclosed by two rows *f.* pillars *f.* Corti and basilar membrane

turaco (tū'rāko) [*Turaco* an African bird.] A water-soluble red plumage pigment containing copper in turaco and other *Aluophagidae*.

tura overdia (tū'rākövər'diə) *n.* [*Turaco F over* green.] A green feather pigment containing iron, in certain plantain-eaters or *Aluophagidae*.

turbinal (tūr'bīnəl) *a.* [*L. turbo* whirl.] Spirally rolled or coiled as bone or cartilage.

turbinate (tūr'bīnāt) *a.* [*L. turbo* whirl.] Top-shaped *appl.* shells *appl.* certain nasal bones or concha nasales.

turgescence (tūrjēs'ēns) *n.* [*L. turgere* to swell] The process of distention of living cell tissue due to increased internal pressure the turgescence condition turgor turgidity

turgor (tū'gōr) *n.* [*L. turgere* to swell.] Distention of cells or tissues due to internal pressure rigidity of plant tissue due to inflation of cells with water

turion (tū'rīōn) *n.* [*L. turis* shoot.] Young scaly shoot budded off from underground stem winter-bud as of *Hydrochara*.

tychocoon (tik'ōēn) *n.* [*Gk. tyche* chance *keos* common.] Those members of a biocoenosis which thrive under different habitat conditions *Opp.* exocoon.

tycholimnetic (tik'olīmnet'ik) *a.* [*Gk. tyche* chance *limne* marshy lake.] Temporarily reached to the bed of a lake and at other times floating *appl.* certain fresh-water organisms

tych potami (tik'ōpotām'ik) *a.* [*Gk. tyche* chance *potamos* river] Thriving only in backwaters, *appl.* potamoplankton.

tylhexactine (tīl'hēktīk'ēn) *n.* [*Gk. tylos* knob *hex* six *aktis* ray] A hexactine spicule with rays ending in knobs.

tylosis (tīlō'sis) *n.* [*Gk. tylos* knob] Development of irregular cells in a cell cavity *a.* cellular intradominal vessel through pits of parenchyma cells callosity callus formation

tylosoid (tīlō'sōid) *n.* [*Gk. tylos* knob *eidos* form] A resin duct filled with parenchymatous cells.

tylostyl (tīlō'stīl) *n.* [*Gk. tylos* knob *stylos* pillar] Spicule pointed at one end knobbed at other

tylotat (tīlō'tāt) *n.* [*Gk. tylos* knobbed] With knob at each end

tylota (tīlō'tē) [*Gk. tylos* knobbed.] A slender dumbbell-shaped spicule

tylotic (tīlō'tik) *a.* [*Gk. tylos* knob.] Affected by tylosis.

tylotoxea (tí'lotók sēa) *n.* [Gk. *tylo* knob *oxy* sharp.] A tylote with one sharp end, directed towards surface of sponge.

tympanic (timpán'ík) *a.* [Gk. *tympanon* drum.] *Part.* tympanum.

tympanohyal (tím'pándhí'al) *n.* [Gk. *tympanon* drum *hyoides* Y shaped.] *Part.* tympanum and hyoid part of hyoid arch embedded in petro-mastoid.

tympanum (tím'pándm) *n.* [Gk. *tympanon*, drum.] The epiphragm of moose; the drum-like cavity constituting middle ear drum of ear membrane of auditory organ on tibia, metathorax, or abdomen of insect. Inflatable air-sac on neck of some Tetraodoninae.

type (típ) *n.* [L. *typus* pattern.] Sum of characteristics common to large number of individuals, serving as ground for classification primary model the actual specimen described as the original of new genus or species.

type locality—the locality in which the holotype or other type used for designation of species was found.

type number—the most frequently occurring chromosome number in a taxonomic group; modal number.

typhlocoel (tíf'loesēl) *n.* [Gk. *typhlos* blind *coela* channel.] Median dorsal longitudinal fold of intestine projecting into lumen of gut of some invertebrates.

typical (típ'tí'al) *a.* Gk. *typus* pattern.] *Appl.* specimen conforming to type or primary example exhibiting in marked degree the essential characteristics of genus or species.

typogenesis (típ'pōsēn'ēsis) *n.* [Gk. *typus* pattern *genesis* descent.] Phase of rapid type-formation in phylogenetic quantitative or explosive evolution.

typology (típ'ol'ōj) *n.* [Gk. *typus* pattern *logos* discourse.] The study of types, as of constitutional types.

typolysis (típ'ol'ī'sis) *n.* [Gk. *typus* pattern *lysis*, loosening.] Phase preceding extinction of type phylogenetic stage.

typostasis (típ'ōst'āsīs, tít'ōst'āsīs) *n.* [Gk. *typus* pattern *stasis* halt.] Relative absence of type formation, static phase in phylogenesis.

tyramin (tí'rāmin) *n.* [Gk. *tyros* cheese *ammoniacum* resinous gum.] A substance causing rise of arterial pressure formed by bacterial action on tyrosine; also secreted by Cephalopoda,  $C_9H_{11}ON$ .

tyrosine (tí'rōsēn) *n.* [Gk. *tyros* cheese.] An amino-acid synthesised in plants, and utilised in animals, as in formation of melanin, adrenalin, and thyroxine  $C_9H_{11}O_4N$ .

Tyson's gland [E. Tyson English anatomist]. Sebaceous glands round the corona of the glans penis.

## U

ul ti (ulēt'ík) *a.* [Gk. *oulos* gum.] *Part.* the gums gingival.

ulna (ul'nā) *n.* [L. *ulna*, elbow.] A long bone on medial side of forearm parallel with radius.

ulnar (ul'nār) *a.* [L. *ulna*, elbow.] *Part.* ulna, *appl.* artery nerve, vein, bone, ligaments.

ulnar nerve, —radiating or cross nerve in wing of insects.

ulnar (ul'nār) *n.* [L. *ulna*, elbow.] Bone, in proximal row of carpals, lying at distal end of ulna.

ulnocarpal (ul'nōkār'pāl) *a.* [L. *ulna*, elbow *carpus* wrist.] *Part.* ulna and carpus.

ulnoradial (ul'nōrādī'al) *a.* [L. *ulna*, elbow *radius* radius.] *Part.* ulna and radius.

ulotrichous (ulōt'rikōs) *a.* [Gk. *oulos* woolly; *trichos* hair.] Having woolly or curly hair.

ultimobranchial bodies, — pair of gland rudiments derived from fifth pharyngeal pouches, which later degenerate and disappear post branchial or suprapericardial bodies.

umbel (ŭm'bĕl) *n.* [*L. umbella, dim. of umbra shade.*] An arrangement of flowers or of polyps springing from a common centre and forming a flat or rounded cluster.

umbellate (ŭm'bĕl'it) *a.* [*L. umbella shade.*] Arranged in umbels.

umbellat, —umbellule

umbelliferous (ŭm'bĕl'ifĕrĭs) *a.* [*L. umbella, shade ferre to carry.*] Producing umbels.

umbelliform (ŭm'bĕl'ifŏrm) *a.* [*L. umbella, shade ferre shape.*] Shaped like an umbel.

umbelligerous (ŭm'bĕl'ĭĕrĭs) *a.* [*L. umbella shade ferre to carry.*] Bearing flowers or polyps in umbellate clusters.

umbellule (ŭm'bĕl'ŭl) *n.* [*L. umbellula, dim. of umbella shade.*] A large cluster of polyps at tip of elongated stalk of *rachis umbellule, g.*

umbellulist (ŭm'bĕl'ŭl'ist) *a.* [*L. umbellula small umbel.*] Arranged in umbels and umbellules.

umbellule (ŭm'bĕl'ŭl) *n.* [*L. umbellula, small umbel.*] A small or secondary umbel.

umbilical (ŭm'bĭl'ĭkəl ŭm'bĭl'ĭkəl) *a.* [*L. umbilicus navel.*] *Port.* navel or umbilical cord *app.* arteries veins, nerves, vesicle, plane etc. omphalic

umbilical cord, —navel cord connects embryo with placenta; f. nuchal or prolongation by which ovul. is attached to placenta.

umbilicat (ŭm'bĭl'ĭkət) *a.* [*L. umbilicus navel.*] Having a central depression navel-like omphaloid.

umbilicus (ŭm'bĭl'ĭkŭs) *n.* [*L. umbilicus navel.*] The navel, central abdominal depression at place of attachment of umbilical cord; bifurcated depression of certain peral shells; an opening near base of feather

umbo (ŭm'bŭ) *n.* [*L. umbo shield boss.*] A protuberance like boss of a shield; swollen point of a cone scale; convexity of tympanic membrane at point of attachment of malleus; malleus; beak or older

part of bivalve shell. A prothoracic projection in certain insects.

umbonal (ŭm'bŭnəl) *a.* [*L. umbo shield-boss.*] *Port.* the umbo.

umbonate (ŭm'bŭn'it) *a.* [*L. umbo shield boss.*] Having a conical or rounded protuberance.

umbraculiferous (ŭmbr'ŭk ŭl'ĕfĕrĭs) *a.* [*L. umbraculum sun-shade.*] Bearing an umbrella-like organ or structure.

umbraculiform (ŭmbr'ŭk ŭl'ĕfŏrm) *a.* [*L. umbraculum, sun-shade; ferre, shape.*] Shaped like an expanded umbrella.

umbraculum (ŭmbr'ŭk ŭl'ŭm) *n.* [*L. umbraculum sun-shade.*] Any umbrella-like structure; pigmented fringe of iris in certain ungulates; papillary appendage in amphibians.

umbrella (ŭmbr'ĕl'ŭ) *n.* [*L. umbella, sun-shade.*] The contractile disc of a jelly-fish; web between arms of certain Octopoda.

unciferous (ŭnsĭf'ĕrĭs) *a.* [*L. uncus hook ferre to carry.*] Bearing hooks or hook-like processes.

unciform (ŭn'ĭfŏrm) *a.* [*L. uncus hook ferre shape.*] Shaped like a hook; barb; *app.* process of ethmoid bone. *n.* Unciform bone or os hamatum or uncinatum of wrist.

uncinate (ŭn'ĭn'it) *a.* [*L. uncus hook.*] Unciform; hook-like; *app.* fasciculus associating temporal and frontal lobes of brain; *app.* process of ribs of birds; process of ethmoid, of head of pancreas.

uncinus (ŭn'ĭn'ŭs) *n.* [*L. uncus hook.*] Small hooked or hook-like structure; a crochets; one of small hooks found on segments of many worms; a hook-like structure found in certain infusorians; a marginal tooth of gastropoda.

uncondition d., —*app.* inborn reflex; *app.* conditioned or acquired reflex.

uncus (ŭng'kŭs) *n.* [*L. uncus hook.*] Hook-shaped anterior extremity of hippocampal gyrus; hooked head of malleus of rotifers; hook-like or bulb process on dorsal portion of ninth abdominal segment of male Lepidoptera; uncinat hair

under wing—one of posterior wings of any insect.

undulos (ūn dōs) *a.* [*L. undatus* billowy] Having undulating and nearly parallel depressions which run into one another and resemble ripple-marks on the seashore.

unequally pinnat—odd pinnate bipinnate pinnat with single terminal leaflet.

ungual (ūng gwā) *a.* [*L. unguis* nail.] Pert or having a nail or claw *appl.* phalanges bearing claws or nails.

unguiculate (ūnggwīk'ūlāt) *a.* [*L. unguiculus* little nail.] Clawed *appl.* petals with narrowed stalk-like portion below

unguis (ūng'gwīs) *n.* [*L. unguis* claw] A nail or claw narrow stalk-like portion of some petals  
bitinous hook on foot of insect  
dental joint, the crochet or tang of arachnid chelicerae  
lacrimal bone the calcar avis *g.*

unguifactor (ūng'wīfākt'ōr) *n.* [*L. unguis* claw *tractus* pull.] A median flexor plate for attachment of retractor muscle of claw in insects.

ungula (ūng'gūlā) *n.* [*L. ungula*, hoof] Hoof.

ungulate (ūng'gūlāt) *a.* [*L. ungula*, hoof] Hoofed hoof like.

unguigrad (ūng'gūigrād) *a.* [*L. ungula* hoof *gradus* step.] Walking upon hoofs.

uniaxial (ū nīk'āks) *a.* [*L. unus* one *axis* axis.] With one axis monaxial.

unibranchiate (ū nībrāng'kiāt) *a.* [*L. unus* one *Gk. brankhē*, gills.] Having one gill.

unicapsular (ū nīk'āpsūlār) *a.* [*L. unus* one *capsula*, small case.] Having only one capsule.

unicell (ū nīēl') *a.* [*L. unus* one *cellula*, cell.] A unicellular organism protophyton, or protozoan.

unicellular (ū nīēl'ūlār) *a.* [*L. unus* one *cellula*, cell.] Having only one cell, or consisting of one cell.

unilobate (ū nīēl'āt) *a.* [*L. unus* one *lobus*, eyelash.] Having one cillum or flagellum

unicorn (ū nīkōrn) *a.* [*L. unus* one; *cornu* horn.] Having single horn-like spine *appl.* shells.

unicostrate (ū nīkō'strāt) *a.* [*L. unus* one *costa* rib.] Having a single prominent mid-rib as certain leaves.

unicotyl denous (ū nīkōtīl'dēnōs) *a.* [*L. unus* one *Gk. kotylē* cup.]

Having a single cotyledon monocotyledonous.

unicuspid (ū nīkōs'pid) *a.* [*L. unus* one *cusps* point of spear] Having one tapering point as tooth.

unidactyl (ū nīdākt'il) *a.* [*L. unus* one *Gk. daktylos* finger] Having one digit only monodactylous.

uniembryonate (ū'nīēm'briōnāt) *a.* [*L. unus* one *Gk. embryon* foetus.] Having one embryo only

unifacial (ū nīf'āshāl) *a.* [*L. unus* one *facies* face.] Having one face or chief surface.

unifactorial (ū nīfākt'ōriāl) *a.* [*L. unus* one *facere* to make.] Pert or controlled by single gene monogenic.

uniflagellate (ū nīfāl'ētāt) *a.* [*L. unus* one *flagellum* whip.] Having only one flagellum.

uniflorous (ū nīfō'rōs) *a.* [*L. unus* one *flos* flower] Bearing only one flower

unifoliate (ū nīfō'liāt) *a.* [*L. unus* one *folium*, leaf.] With one leaf

unifoliate (ū nīfō'liāt) *a.* [*L. unus* one *folium* stem of *folium* leaf.] Having one leaflet only

uniforāt (ūnī'ōrāt) [*L. unus* o *foratus* pierced.] Having only one opening

unigenital (ū'nījēm'tiāl) *a.* [*L. unus* one *genuus* twin-born.] *Appl.* arrangement of pore pairs in one row in ambulectra of some echinoderms.

unihumoral (ū nīhū mōrāl) *a.* [*L. unus* one *humor* fluid.] Activated by only one neurohumor *appl.* certain chromatophores.

unijugāt (ū'nījōōg'āt) *a.* [*L. unus* one *jugum* yoke.] *Appl.* pinnate leaf having one pair of leaflets.



unilabiate (û nîlâ'bîlât) a. [L. *unus* one *labium* lip.] With one lip or labium.

unilacunar (û nîlâkû nâr) a. [L. *unus* one *lacuna* cavity] With one lacuna having one leaf-gap, *appl* nodes.

unilaminar (û nîlâm'înlât) a. [L. *unus* one *lamina*, layer] Having one layer only *appl* tissues.

unilateral (û nîlâ't'êrâl) a. [L. *unus* one *latus* side] Arranged on one side only.

unilocular (û nîlôk'ulâr) a. [L. *unus* one *loculus* compartment.] One-celled having one compartment only *appl* ovaries *appl* Foraminifera.

unimucronate (û'nîmû'krônât) a. [L. *unus* one *mucro* sharp point.] Having a single sharp point or tip *appl* leaves, etc.

uninucleate (û'nînû'klêât) a. [L. *unus* one *nucleus* nucleus.] Having one nucleus uninuclear.

uniovular (ûnlô'vûlâr) a. [L. *unus* one *ovum* egg] *Part.* a single ovum monosygotic *appl* twinning.

uniparous (ûnlp'ârûs) a. [L. *unus* one *parvus* to beget.] Producing one offspring at birth having a cymose inflorescence with one axis at each branching.

unipetalous (û nîpêt'âlûs) a. [L. *unus* one *Gk. petala* leaf] Having one petal monopetalous.

unipolar (û nîpô'lâr) a. [L. *unus* one *polus* pole] Having one pole only *appl* some nerve-cells.

unipotent (ûnlp'êtnt) a. [L. *unus* one *potens* powerful.] *Appl* cells which can develop into cells of one kind only unipotent *appl* totipotent.

unipalous, -monopalous.

uniseptat (û nîsp'êtât) a. [L. *unus* one *septum* hedge.] Having one septum or dividing partition.

uniseriate (ûnl'ê'rîât) a. [L. *unus* one *series* rank] Arranged in one row or series *appl* certain ascospores *appl* fins with radials on one side of basalia uniseriate *appl* medillary rays.

uniserrate (û nîsê'r'êt) a. [L. *unus* one *serra*, saw] Having only one row of serrations on edge.

uniserrulate (û nîsê'r'ûlât) a. [L. *unus* one *serrula*, dim. of *serra* saw] Having one row of small serrations on edge.

unisessile (û nîsê'tsê) a. [L. *unus* one *sessis*, bristle.] Bearing one bristle.

unisexual (û nîsêk'sûâl) a. [L. *unus* one *sexus* sex.] Of one or other sex distinctly male or female diclinous gonochoristic.

unispiral (û nîsp'r'âl) a. [L. *unus* one *spira* coil.] Having one spiral only.

unistrat (û nîstrât) a. [L. *unus* one *stratum* layer] Having only one layer.

univalent (ûnîv'âlênt, û nîv'ênt) a. [L. *unus* one *valere* to be strong] *Appl* single unpaired chromosome.

univalv (û nîvâl'v) a. [L. *unus* one *valvus* folding door.] A shell consisting of one piece or valve as a gastropod shell.

universal donor—person with blood of group O or four whose blood may be transfused into or whose kin may be grafted on to a member of any other group without harmful reaction.

universal recipient,—person with blood of group A.B. or one into whom blood may be transfused from member of any other group, without harmful reaction.

univoltin (û nîvô'tîn) a. [L. *unus* one *lt. volare*, time] Producing one brood in the season, as certain silkworms, coccids.

uniparid (ûn'pârîd) a. [L. *unus* not *par* equal.] Situated in median line of body consequently single.

urachus (û râkûs) n. [Gk. *urao* urino *urere* to hold.] The median umbilical ligament the fibrous cord extending from bladder to umbilicus.

urate (û râî) n. [Gk. *ouron* urino] A salt of uric acid *appl* excretory cells in fat body of insects lacking Malpighian tubules.

urceolat (û rûlât) *n.* [*L. urceolus* small pitcher] Urn or pitcher shaped *appl.* apothecium *appl.* calyx or corolla *appl.* shells of various protozoa; having *n* urceolus.

urceolus (ûrûê'ûlûs) *n.* [*L. urceolus* small pitcher] Any pitcher-shaped structure the external tube of certain rotifers.

urea (û'rêâ) *n.* [*Gk. ouron* urine.] Carbamide a crystalline excretory substance, chief organic constituent of urine  $\text{CO}(\text{NH}_2)_2$ .

urediatum (û'rêdî'ûtorû) *n.* [*L. urredo* blight.] In rusts, the mycelium-bearing uredospores.

uredo (ûrê'dû) *n.* [*L. urredo* blight.] Summer stage of rust fungi.

uredobeds,—uredospores.

uredosorus (ûrê'dûûs'rûs) *n.* [*L. urredo* blight *Gk. sorus* heap] A group of developing uredospores.

uredospores (ûrê'dûûpûrs) *n. pl.* [*L. urredo* blight *Gk. sporos* seed.] Reddish summer-spores borne on sporophore of rust fungi redobeds.

ureotelic (û'rêûêl'ûk) *a.* [*Gk. ouron*, urine; *telos* end.] Excreting nitrogen as urea *appl.* mammals of ureotelic.

urter (ûrê'têr) *n.* [*Gk. ourter* urter.] Duct conveying urine from kidney to bladder or cloaca.

urethra (ûrê'tûrâ) *n.* [*Gk. ourêthra* from *ouron* urine.] Duct leading off urine from bladder and in male conveying semen in addition.

uric acid,—end-product of nucleic acid katabolism in mammals, main nitrogenous constituent of urine in reptiles and birds trioxypurine  $\text{C}_5\text{H}_4\text{N}_4\text{O}$

uricas —an enzyme of kidney and liver causing oxidation of uric acid to allantoin and carbon dioxide uric acid oxidase.

uricolylt (û rûkolû'ûk) *a.* [*Gk. ouron* urine *lysis*, to loose.] Decomposing uric acid *appl.* index, the ratio between nitrogen excreted as allantoin to that present in urine as uric acid.

uricotelic (û rûkûêl'ûk) *a.* [*Gk. ouron* urine *telos* end.] Excreting nitrogen as uric acid *appl.* birds; of ureotelic.

urinary (û rûnûrî) *a.* [*L. urina*, urine.] Pert. rice *appl.* bladder organ papillae uriferous tubules.

urine (û'rûn) *n.* [*L. urina* urine.] A fluid excretion from kidneys in mammals, a solid or semisolid excretion in birds and reptiles.

uriniparous (û rûnûp'ûrûs) *a.* [*L. urina* urine *parre* to bring forth.] Urine-producing; *appl.* tubules in cortical portion of kidney.

urinogenital (û rûnûjên'tûl) [*L. urina* urine *gignere* to beget.] Pert. urinary and genital systems.

urinogenital ridge —a paired ridge from which urinary and genital systems are developed.

urinogenital sinus,—bladder or pouch in connection with urinary and genital systems in many animals.

urite (û'rû) *n.* [*Gk. oura*, tail.] An abdominal segment in arthropods anal cirrus in polychaetes.

urna (ûrn) *n.* [*L. urna* jar.] The theca or capsule of monemes an urn-shaped structure one of the ciliate bodies floating in coelomic fluid of annulates.

urobilin (û'robûlûn) *n.* [*Gk. ouron* urine *L. bilis* bile.] A brown pigment of urine; stercobilin  $\text{C}_{20}\text{H}_{24}\text{O}_6\text{N}$

urocardiac ossicle,—a short stout bar forming part of gastric mill in certain Crustacea.

urochord (û rûkûrd) *n.* [*Gk. oura*, tail *chord* cord.] The notochord when confined to caudal region, as in tunicates.

urochrome (û rûkrûm) *n.* [*Gk. ouron* urine *chroma*, colour] A yellowish pigment to which ordinary colour of urine is due.

urocoel (û'rûûêl) *n.* [*Gk. ouron* urine *hollis* hollow] An excretory organ in Mollusca.

urocyst (û rûûst) *n.* [*Gk. ouron*, urine *hyster* bladder] The urinary bladder

urodaeum (û rôdê ðm) *n.* [Gk. *ouron*, urine *adialis* way.] The part or chamber of cloaca into which ureters and genital ducts open.

urodelous (û rôdê'los) *n.* [Gk. *oura*, tail *delos* visible.] With persistent tail.

urogastric (û rôgâ'strik) *n.* [Gk. *oura*, tail *gaster* stomach.] *Part.* the posterior portion of the gastric region in certain crustaceans.

urogenital—urinogenital *part*

us hyal (û rôhâil) *n.* [Gk. *oura* tail *Ayasides* Y-shaped.] A median bony element in hyoid arch below hypohyals basibranchiostegal.

uromere (û rômêr) *n.* [Gk. *oura* tail *meros* part.] An abdominal segment in Arthropoda.

uron me (û rônêm) *n.* [Gk. *oura* tail *urone*, thread.] A tail-like structure of some ciliate Protozoa.

uropatagium (û rôpâ'tâj'ûm) *n.* [Gk. *oura*, tail *L. patagium* border.] Membrane stretching from one femur to the other in bats podical plate of insects.

uropod (û rôpôd) *n.* [Gk. *oura* tail *podus* foot.] An abdominal appendage in Crustacea.

uropygial (û rôpîj'âl) *n.* [Gk. *ouras* end of os sacrum *pyge* rump.] *Part.* uropygium *appl.* oil gland.

uropygium (û rôpîj'ûm) *n.* [Gk. *ouras* end of os sacrum *pyge* rump.] The hump at end of bird trunk, containing caudal vertebrae and supporting tail feathers also uropyge.

uropyl ric (û rôpîl'rik) *n.* [Gk. *oura*, tail *pyle* gate.] *Part.* posterior portion of crustacean stomach

urorectal (û rôrêk'tâl) *n.* [*L. urinae* *rectus* straight.] *Appl.* embryonic septum, which ultimately divides intestine into anal and urogenital parts.

ur rubin (û rôroob'in) *n.* [Gk. *ouron* urine *L. ruber* red.] The red pigment of urine

urosacral (û rôsâ'krâl) *n.* [Gk. *oura* tail *urosacrum* sacred.] *Part.* caudal and sacral regions of the vertebral column.

urosoma (û rôsâm) *n.* [Gk. *oura*, tail *soma*, body.] Tail region of fish abdomen of arthropod.

urostegæ (û rôstêj) *n.* [Gk. *oura*, tail *stegæ* roof.] Ventral tail plate of serpent urostegite.

urostion (û rôs'tîôn) *n.* [Gk. *oura*, tail *stion* bone.] Median ossification on the back portion of the keel bearing part of the sternum in birds.

urosternite (û rôstêr'ait) *n.* [Gk. *oura* tail *sternon*, breast.] Ventral plate of arthropodan abdominal segment.

urosthenic (û rôstê'nîk) *n.* [Gk. *oura* tail *sthenos* strength.] Having tail strongly developed for propulsion.

urostyle (û rôstîl) *n.* [Gk. *oura*, tail *stylos* pillar.] An unsegmented bone, posterior part of vertebral column of anurous amphibians hypural bone in fishes.

uroxanthin (û rôxân'tîn) *n.* [Gk. *ouron* urine *xanthos* yellow.] A yellow pigment of normal rice

urticant (ûr'tikânt) *n.* [*L. urtica*, nettle.] Nettle stinging *appl.* thread-cells.

urticarial (ûr'tikâr'âl) *n.* [*L. urtica*, nettle.] Nettle urticant *appl.* hairs, as of some caterpillars.

urticator (ûr'tikâ'tôr) *n.* [*L. urtica* nettle.] A netting or stinging cell nematocyst.

us inheritance,—transmission of acquired characteristics.

uterine (û'têrîn) *n.* [*L. uterus* womb.] *Part.* uterus *appl.* artery ves. plexus glands etc. of mammals

uterin bell—muscular bell like structure in female of certain thread-worms, communicating with coelom and uterus.

ut ine crypta,—depressions in uterine mucosa, for accommodation of chorionic villi.

ut roabdominal (û rôsôbdôm'inâl) *n.* [*L. uterus* womb *abdomen* stomach.] *Part.* uterus and abdominal region

- uterosacral** (u'tēr-săk'rāl) *a.* [*L. uterus* womb *sacrum* sacred.] *Appl.* two ligaments of sacro-genital folds attached to sacrum.
- uterovaginal** (u'tēr-ō-văj'nal) *a.* [*L. uterus* womb *vagina*, *vagina*.] *Part.* uterus and vagina.
- teroverical** (u'tēr-ō-vēr'ikāl) *a.* [*L. uterus* womb *vesicula* vesicle] *Part.* uterus and bladder
- uterus** (u'tērūs) *n.* [*L. uterus* womb.] The organ in female mammals in which the embryo develops and is nourished before birth an enlarged portion of oviduct modified to serve as place for development of young or of eggs.
- uterus masculinus**,—median sac, vestigial Müllerian duct in male attached to dorsal surface of urogenital canal *truncus prostaticus*, *vesica prostatica*, *sinus prostaticus* *Weber's organ*
- utricle** (u'trīkl) *n.* [*L. utriculus* small bag.] Utriculus an air bladder of aquatic plants membranous indehiscent on -celled fruit; protoplasm enveloping a vacuole membranous sac of ear labyrinth *uterus masculinus*.
- utricular** (u'trīk'ulār) *a.* [*L. utriculus* small bag.] Containing vesicle like small bags *appl.* modification of laticiferous tissue.
- utriculus**,—utricle *s.*
- uva** (ū'vā) *n.* [*L. uva*, *grape*.] Pulpy indehiscent fruit with central placenta, such as the grape.
- uvula** (ū'vūl) *n.* [*L. uva*, *grape*.] Pigmented epithelium covering posterior surface of iris *pars interna* *retinae*.
- uvette** (ū'vet') *n.* [*F* from *L. uva*, *grape*.] The glandular junction of the two demasian vessels whence duct passes to exterior
- uvula** (ū'vūlā) *n.* [*L. L. alvea* of *L. uva*, *grape*.] Part of inferior vermis of cerebellum conical pendulous process from soft palate small elevation in mucous membrane of urinary bladder caused by prostatic.

## V

- vaccin** (vāk'sēn, -in) *n.* [*L. vacca*, cow] An attenuated living culture of a pathogenic organism as those used against smallpox and other diseases.
- vacuolar** (vāk'ūlār) *a.* [*L. vacuus* empty] *Part.* or like a vacuole.
- vacuolated** (vāk'ūlār'ēd) *a.* [*L. vacuus* empty] Containing vacuoles.
- vacuole** (vāk'ūl) *n.* [*L. vacuus* empty] One of spaces in cell protoplasm containing air sap or partially digested food.
- vacuolization** (vāk'ūlār'ahōn) *n.* [*L. vacuus* empty] The formation of vacuoles appearance or formation of drops of clear fluid in growing or ageing cells.
- vacuome** (vāk'ūm) *n.* [*L. vacuus* empty] The vacuolar system of single cell.
- vagal** (vā'gāl) *a.* [*L. vagus* wandering] *Part.* the vagus.
- vagina** (vāj'nal) *n.* [*L. vagina* sheath.] A sheath or sheath-like tube expanded sheath-like portion of leaf-base canal leading from uterus to external opening of genital canal.
- vaginae in coeme**,—mucous sheaths lessening friction of tendons gliding in fibro-mucous canals as in hand or foot.
- vaginal** (vāj'nal) *vāj'nal* *a.* [*L. vagina*, sheath.] *Part.* or supplying *vagina* *appl.* arteries nerves, etc.
- vaginal process**,—projecting lamina on inferior surface of petrous portion of temporal lamina on sphenoid.
- vaginate** (vāj'nat) *a.* [*L. vagina* sheath.] Invested by sheath.
- vaginervose** (vāj'ner'vōs) *a.* [*L. vagus* wandering *nervus* nerve] With irregularly-arranged veins.
- vaginicolous** (vāj'nik'ūlūs) *a.* [*L. vagina*, sheath *colere* to inhabit.] *Appl.* certain infusorians which build and inhabit sheaths or cases.
- vaginiferous** (vāj'inf'ērūs) *a.* [*L. vagina*, sheath *ferre* to carry] V. glans invested by a sheath.

**vaginipennate** (vāj'fnpēn'āti) *a.* [*L. vagina* sheath *pinna* feather] Having wings protected by a sheath.

**vaginula** (vāj'ln ūlā) *n.* [*L. vagina* *dim.* of *vagina* sheath.] A small sheath sheath surrounding basal portion of porogonium in mosses.

**vagus** (vā'gūs) *n.* [*L. vagus* wandering] The pneumogastric or tenth cranial nerve visceral accessory nervous system in insects.

**vall cula** (vāl'ēk'ūlā) *n.* [*L. L. dim.* of *L. vallis* valley] A depression or groove.

**vallecular canal**,—one of canals in cortical tissue of stem of horse-tails.

**valleculat** (vāl'ēk' ūlāt) *a.* [*L. L. dim.* of *L. vallis* valley] Grooved.

**Valvaiva**,—see sinuses of Valvaiva.

**valval** (vāl'vāl) *a.* [*L. valva* fold.] *Appl.* view of diatom when one whol valve is next the observer.

**valvate** (vāl'vāt) *a.* [*L. valva* fold.] Hinged at margin only meeting at edges opening by or furnished with valves *Peri* valva.

**val** (vāl) *n.* [*L. valva* fold.] Any of various structures which permit flow in one direction but are capable of closing tubeessel and preventing backward flow. Any of pieces formed by capsule on dehiscence. *Indik* structure of certain anthers. Flowering glume or lemma. One of pieces forming bell of diatom. Any of pieces which form bell in rain molluscs, barnacles, etc. One of pieces forming sheath of ovipositor or of leaper. Certain insects.

**valve** (Thebesius) (f c Thebesius) (German name) Val of the coronary sinus in right atrium (thebesian ab. al la sinus coronarii cordis).

**valve of Vissens** (R. I. Vissens) (French anatomist) Thin layer of white matter extending between superior peduncles of cerebellum in antero medullary lumen.

**valvelet** (Al Tét) alval (vāl ūlā)

*n.* [*L. valvula* *dim.* of *valva* fold.] A small fold or valve.

**valvulae conniventes**,—circular spiral or bifurcated folds of mucous membrane found in alimentary canal from duodenum to ileum, affording increased area for secretion and absorption. Herking's valves.

**valvular** (vāl'vŭlār) *a.* [*L. dim.* of *valva*, fold.] *Peri* r like valve or valves *Appl.* dehiscence of certain capsules and anthers.

**valval** (vāl'vŭl) *n.* [*L. dim.* of *valva* fold.] A valvula upper palea of gramin.

**vane** (vān) *n.* [*A.S. fana*, small flag] The vexillum or web of feather consisting of barbs, etc.

**vannal** (vān āl) [*L. vannus* fan] *Peri* vannus *Appl.* vena.

**vannus** (vān ūs) *n.* [*L. vannus* fan.] Fan-like posterior lobe of hind wing in some insects. anal lobe.

**variant** (vā'riānt) *n.* [*L. variare* changing] An individual or species deviating in some character or characters from type.

**variate** (vā'riāt) *n.* [*L. variare* to change] The variable quantity in variation. character variable in quality magnitude.

**variation** (vā'riāshūn) *n.* [*L. variare* to change.] Divergence from type in certain characteristics.

**varicellat** (vār'hēl'āt) [*L. varix* dilatation.] *Appl.* bells with small or indistinct ridges.

**varile** (vār'iŭl) *n.* [*L. variare* various] A small petal-like marking found on various parts in insects. fincula.

**arix** (vār'ik) *varic* (vār'ik) *plu* [*L. varix* dilatation] Prominent ridges across whorls of various nivalve shells, showing previous position of outer lip.

**vas** (vās) *n.* *vasa* (vā'sā) *plu* [*L. vas* vessel.] A small vessel duct canal blind to be.

**vasa deferentia**,—ducts leading from testes to penis exterior urinogenital canal or cloaca. deferent duct.

**vasa efferentia**, — ductules leading from testis to vas deferens.

**vasa vasorum**, — nutrient vessels for the larger arteries and veins.

**vasal** (vā'sāl) *a.* [L. *vas* vessel.]

*Part* or connected with a vessel.

**vascular** (vā'skülār) *a.* [L. *vasculum* small vessel.] *Part* consisting of or containing vessels adapted for transmission or circulation of fluid.

**vascular areas**, — scattered areas developed between endoderm and mesoderm of yolk-sac, beginnings of primitive blood-vessels.

**vascular bundle**, — a group of special cells consisting of two parts xylem or wood portion and phloem or bast portion; many have in addition a thin strip of cambium separating the two parts.

**vascular cylinder** — *stela*.

**vascular tissue**, — specially modified plant-cells, usually consisting of either tracheal or sieve cells, for circulation of sap.

**vascular tunic**, — choroid, ciliary body and iris.

**vasculum** (vā'skülūm) *n.* [L. *vasculum* small vessel.] A pitcher shaped leaf or acidium a small blood-vessel.

**vasifactive** (vā'sfākt'iv) *a.* [L. *vas* vessel; *facere* to make.] Producing new blood-vessels.

**vasiform** (ā'sfōrm) *a.* [L. *vas* vessel; *forma*, shape.] Functioning as or resembling duct vascular

**vasoconstrictor** (vā'skōnstrīkt'ōr) *a.* [L. *vas* vessel *constringere* to draw tight.] Causing constriction of blood vessels.

**vasodentin** (vā'sōdēnt'īm) *n.* [L. *vas* vessel *dens* tooth.] A variety of dentine permeated by blood-vessels.

**vasodilatin** (vā'sōdillāt'īm) *n.* [L. *vas* vessel *dilatatus* separated.] Product of protein disintegration corresponding in properties with histamine.

**vasodilator** (vā'sōdillāt'ōr) *a.* [L. *vas* vessel *dilatatus* separated.] Relaxing or enlarging the vessels.

**vasoformative**, — *vasifactive* *q.v.*

**vasoganglion** (ā'sōgāng'glōn) *n.*

[L. *vas* vessel; Gk. *ganglion* little tumour] A compact plexus of blood-vessels or net mirabile representing reduced hyoidian gill as in certain fishes.

**vasohypertonic**, — vasoconstrictor *q.v.*

**vasohypotonic**, — vasodilator *q.v.*

**vasoinhibitory** — vasodilator *q.v.*

**vasomotion** (ā'sōmō'shōn) *n.* [L. *vas* vessel *movere* to move.] A change in calibre of blood-vessel.

**vasomotor** (vā'sōmōt'ōr) *a.* [L. *vas* vessel *movere* to move.] *Appl.*

nerves supplying muscles in wall of blood vessels and regulating calibre of blood vessels, through containing both vasoconstrictor and vasodilator fibres.

**vasopressin** (vā'sōprēs'in) *n.* [L. *vas* vessel *pressus* pressure.] A hormone of posterior lobe of pituitary gland which stimulates plain muscle constricting arteries and raising blood pressure; *β* hypophosphorus pituitin.

**vastus** (vā'stūs) *n.* [L. *vastus* immense.] A division of quadriceps muscle of thigh.

**Vater's corpuscles** [4 *Vater* German anatomist]. Pacinian corpuscles, *q.v.*

**V chromosomes**, — chromosomes with two arms mediocentric chromosomes.

**vector** (vākt'ōr) *a.* [L. *vector* bearer] A carrier as many invertebrate hosts, of pathogenic organisms any agent transferring parasite to host.

**vegetal pole**, — that side of blastula at which megameres collect; the lower more slowly segmenting portion of telolecithal egg, *opp.* animal pole.

**vegetatively** (vēj'ētā'ti) *a.* [L. *vegetare*, to enliven.] *Appl.* stage of growth in plants *opp.* reproductive period; *appl.* foliage shoots *opp.* flower reproductive shoots *appl.* reproduction by bud-formation or other asexual method in plants and animals; *appl.* nervous system, the autonomic nervous system.

vegetative cone—the apical point.  
 vegetative nucleus—macronucleus,  
 meganucleus trophic nucleus,  
 trophonucleus pollen tube nucleus.  
 vegetative pole—vegetal pole *q.v.*  
 vell (vél) *n.* [L. *velum* covering]  
 Velum calyptra indusium.  
 v lns (vânz) *n. plu.* [L. *vena*, vein]  
 Branched vessels which convey  
 blood to heart; ribs or nervures of  
 insect wing branching ribs or  
 strands of vascular tissue of leaf.  
 velamen (vélâ roën) *n.* [L. *velamen*  
 covering] A membrane sheath of  
 trachea at apex of aerial roots  
 of orchids a specialized moisture-  
 absorbing tissue velamentum.  
 velaminous (vélâm'înu) *a.* [L.  
*velamen* covering] Having  
 velamen *appl.* roots  
 velar (vél'âr) [L. *velum* covering]  
*Part* or situated near velum.  
 velarium (vélâ rîûm) *n.* [L. *velarium*  
 wing] Velum of certain C bo-  
 medusae which differs from a true  
 velum in containing endodermic  
 canals margin of umbrella, includ-  
 ing tentacles, in Scyphozoa.  
 velate (vél'â) *a.* [L. *velum* cover-  
 ing] Veiled covered by a velum.  
 veliger (vél'ijér) *n.* [L. *velum*  
 covering *gerere* to carry] Second  
 stage in larval life of certain mol-  
 luscs when head bears a velum.  
 vellus (vél'ûs) *n.* [L. *vellus* fleece]  
 The stipe of certain fungi  
 velum (vél'ûm) *n.* [L. *velum* cover-  
 ing] A membrane or structure  
 similar to a veil in Hydromedusae  
 and certain jelly-fishes, the annular  
 membrane projecting inwards from  
 margin of bell membrane in  
 connection with buccal cavity in  
 lancelet flap-like structure for  
 closing off choanae from mouth  
 cavity in Crocodilus membrane-  
 like structure bordering oral cavity  
 of certain culicids ciliated swim-  
 ming organ of veliger larva  
 mass of tissue stretching from stipe  
 to plectus in certain thallophytes  
 membrane partly covering opening  
 of foramen in insect  
 velutinous (vélû i ôv) [It *vell* /

velvet.] Velvety covered with very  
 fine dense short upright hairs.  
 velvet (vél'ët) *n.* [M.E. *velvet*  
 velvet.] Soft vascular skin which  
 covers antlers of deer during growth  
 vena (vênâ) *n. v. nae* (v'ê) *pl.*  
 [L. *vena* vein.] A vein, or vessel by  
 which blood is carried from body to  
 heart.  
 venation (vênâshûn) *n.* [L. *vena*  
 vein.] System or disposition of  
 veins or nervures *venation*.  
 venom (vên'in) *n.* [L. *venenum* poison]  
 A toxic substance of snake  
 venom.  
 venomous (vên'ômâs'ivâr) *a.*  
 [L. *venenum* poison *salivare* to  
 salivate.] *Part* salivary glands of  
 which the secretion is poisonous.  
 venomous (vên'ômâs) *a.* [L. *venenum*  
 poison.] Having poison-glands  
 able to inflict a poisonous wound.  
 venose (vên's) *a.* [L. *vena* vein]  
 With many and prominent veins.  
 venous (vên's) *a.* [L. *vena* vein]  
*Part* veins *appl.* blood returning  
 to heart after circulation in body  
 vent (vên't) *n.* [L. *venter* to cleave]  
 The anus cloacal or anal aperture  
 in lower vertebrates *appl.* feather  
 an under tail covert  
 v nter (vên'tér) *n.* [L. *venter* belly]  
 The abdomen lower abdominal  
 surface protuberance as of  
 muscle smooth concave surface  
 swollen basal portion of arche-  
 gonium.  
 ventrad (vên'trâd) *adv.* [L. *venter*  
 belly *ad* to] Towards lower or  
 abdominal surface, *opp.* dorsad.  
 ventral (vên'trâl) *n.* [L. *venter* belly]  
*Part* or situated on lower or  
 abdominal surface *part* or design-  
 ating that surface of petal etc.  
 that faces centre or axis (flower  
*appl.* lower surface of flattened  
 ribbon-like thallus).  
 ventricle (vên'trîkl) *n.* [L. *ventri-  
 culus* *d.m.* of *venter* belly] A  
 cavity or chamber in heart or  
 brain *appl.* fusiform fossa of  
 larynx gizzard of birds mid-gut  
 or chylic ventricle of insect  
 entriculus.

ventricose (vēn'trīkōs) *a.* [*L. ventris* belly] Swelling out in the middle or unequally *appl.* corolla *appl.* shells.

ventricular (vēn'trīk ūlār) *a.* [*L. ventriculus* belly] *Part* a ventricle *appl.* ligaments and folds of larynx; *appl.* septum and valves in heart.

ventricul *a.* — the stomach *a.* ventricle.

ventrodorsal (vēn'trōdōr'sāl) *a.* [*L. ventris* belly *dorsum* back.] Extending from ventral to dorsal surface.

ventrolateral (vēn'trōlāt ērāl) *a.* [*L. ventris* belly *latus* side.] At side of ventral region ventral and lateral.

ventral (vēn'trāl) *a.* [*L. ventralis*, *stem* of veins, vein.] Small vein of leaf or of insect wing small vessel conducting venous blood from capillaries to vein.

venulose (vēn ūlōs) *a.* [*L. venula*, veinlet.] Having numerous small veins.

vermian (vēr'mīn) *a.* [*L. vermis* worm.] Worm-like *part* vermian.

vermicular (ēr'mīk'ŭlār) *a.* [*Dim.* of *L. vermis* worm.] Resembling a worm in appearance or movement.

vermiculate (ēr'mīk'ŭlāt) *a.* [*Dim.* of *L. vermis* worm.] Marked with numerous sinuate fine lines bands of colour or by irregular depressed lines.

vermiculation (vēr'mīk'ŭlāt shūn) *n.* [*Dim.* of *L. vermis* worm.] Worm-like or peristaltic movement fine wavy markings.

vermicul (vēr'mīk'ŭl) *n.* [*Dim.* of *L. vermis* worm.] Motile or cokinetic stage of some Sporozoa small worm-like structure.

vermiform (ēr'mīfōrm) *a.* [*L. vermis* worm *forma*, shape] Shaped like worm *appl.* certain Protista and numerous structures, especially appendix *appl.* body of a scolopendra.

vermis (vēr'mīs) *n.* [*L. vermis* worm.] Annulated median portion

of cerebellum central portion of cerebellum in birds and reptiles.

vernalin (vērnāl'īn) *n.* [*L. vernalis* of the spring] A substance or hormone believed to control temperature effect in vernalisation, and possibly concerned in the formation of florigen.

vernalisation (ēr'nālīzā shūn) *n.* [*L. vernalis* of the spring] A method of inducing the plant embryo to complete part of its development independently of its rate of growth theory of plant development based upon sequence of mutually independent phases; first developmental phase, preceding photostage, of annual and some perennial herbaceous plants; thermophase jarovization.

vernalised (vēr'nālīz'd) *a.* [*L. vernalis* of the spring] *Appl.* plant which has completed part of its development before sowing.

vernation (vērnāl shūn) *n.* [*L. vernare* to sloughing] The arrangement of leaves within bud of pre-foliation.

verruca (vēr'd'kū, -oo) *n.* [*L. verruca*, wart.] A wart like projection wart-like apothecium one of small wart like projections surrounding base of polyps in many Alcyonaria one of the blister-like evaginations of body wall in some sea anemones.

verruciform (vēr'd'vīfōrm, -oo) *a.* [*L. verruca* wart *forma*, shape.] Wart-shaped.

verrucose (vēr'd'kōs) *a.* [*L. verruca*, wart.] Covered with wart-like projections.

versatili (vēr'sālīl) *a.* [*L. versatilis* turning around.] Swinging freely *appl.* anthers capable of turning backwards and forwards, *appl.* bird toe.

versicoloured (vēr'sīkāl'ērd) *a.* [*L. versicolor* changing colour] Variegated in colour capable of changing colour.

Verson glands,—ecdysial glands,  
v



- vertebra** (vēr'tēbrā) *n.* [*L. vertebra* turning joint.] Any of the bony or cartilaginous segments that make up the backbone one of the ossicles in an ophiuroid arm.
- vertebra prominens**,—seventh cervical vertebra.
- vertebral** (vēr'tēbrāl) *a.* [*L. vertebra, vertebra.*] *Part* spinal column *appl.* various structures situated near or connected with spinal column, or with any structure likened to spinal column.
- vertebrarterial canal**,—canal formed by foramina in transverse processes of cervical vertebrae or between cervical rib and vertebra.
- vertebrate** (vēr'tēbrāt) *a.* [*L. ver* above *vertebra.*] Having a backbone or spinal column.
- vertebration** (vēr'tēbrāshūn) *n.* [*L. vertebra, vertebra.*] Division into segments or parts resembling vertebrae.
- vertex** (vēr'tēks) *n.* [*L. vertex* top.] Top of head highest point of skull region between compound eyes in insects.
- vertical** (vēr'tikāl) *a.* [*L. vertex* top.] Standing upright lengthwise, in direction of axis *part* vertex (head).
- vertical margin**,—limit between frons and occiput in Diptera.
- verticil** (vēr'tisil) *n.* [*L. verticillus* dim. of *veritas* whorl.] An arrangement of flowers, structures or inflorescences about the same point on the axis.
- verticillate** (vēr'tisilāt) *a.* [*L. verticillus* small whorl after star.] A much condensed cyme with appearance of whorl but in reality arising in axis of opposite leaves.
- verticillate** (vēr'tisilāt) *a.* [*L. verticillus* small whorl.] *Appl.* antennae whose points are surrounded, at equal distances, by stiff hairs disposed in verticils whorled.
- verumontanum** (vēr'omōntā'nūm) *n.* [*L. veru* spot *montanum* mountainous.] Ridge on floor of urethra, with small elevation where seminal ducts enter the colliculi & seminales urethral crest.
- vesica** (vēs'ikā, vēs'ikl) *n.* [*L. vesica, bladder.*] Bladder.
- vesica fellea**,—gall-bladder.
- vesica prostatica**,—prostatic uricle sinus pocularis uterus masculinus, *q.v.*, or Weber's organ.
- vesica urinaria**,—urinary bladder.
- vesical** (vēs'ikāl) *a.* [*L. vesica, bladder.*] *Part* or in relation with bladder *appl.* arteries, etc.
- vesicle** (vēs'ikl) *n.* [*L. vesicula* dim. of *vesica, bladder.*] Small globular or bladder like air space in tissues small cavity or sac usually containing fluid hollow prominence on shell or coral one of three primary cavities of brain.
- vesicula** (vēs'ik'ulā) *n.* [*L. vesicula, small bladder.*] A small bladder like cyst or sac; a vesicle.
- vesicula seminalis**,—a sac in which spermatozoa complete their development and are stored.
- vesicular** (vēs'ik'ulār) *a.* [*L. vesicula, small bladder.*] Composed of or marked by presence of vesicle-like cavities bladder-like.
- vesicular gland**,—a gland in tissue underlying epidermis in plants and containing essential oils.
- vesicular ovarian follicle**,—Graafian follicle *q.v.*
- vesiculase** (vēs'ik'ulās) *n.* [*L. vesicula, small bladder.*] An enzyme from secretion of prostate gland capable of coagulating contents of seminal vesicles.
- vespertine** (vēs'pērtin) *a.* [*L. vespertinus* of the evening.] Blooming or active in the evening crepuscular.
- vespid** (vēs'poid) *n.* [*L. vespa* wasp *Gk. vespa* like.] Wasp-like.
- vessel** (vēs'el) *n.* [*L. vasellum* dim. of *vas* vessel.] Any tube or canal with properly defined walls in which fluids, such as blood, lymph, etc., circulate continuous tube formed by superposition of numerous cells.
- vestibular** (vēs'tib'ulār) *a.* [*L. vestibulum* passage.] *Part* a vestibule *appl.* artery bulb, fissure gland etc.
- vestibulate** (vēs'tib'ulār) *a.* [*L. vestibulum* passage.] In the form of

a passage between two channels resembling or having vestibule.

**vestibul** (vĕs'tĭbŭl) *n.* [*L. vestibulum* passage.] Vestibulum a cavity leading into another cavity or passage, as cavity of ear labyrinth; space between labia minora containing opening of urethra; portion of ventricle directly below opening of aortic arch; cavity leading to larynx; nasal cavity posterior chamber of bird's cloaca; small tubular or grooved depression leading to mouth in most infusorians; space within circle of tentacles in endoproctan polyps; pit leading to pore stoma of leaf.

**vestige** (vĕs'tij) *n.* [*L. vestigium* trace.] A small degenerate or imperfectly developed organ or part which may have been complete and functional in some ancestor.

**vestigial** (vĕs'tij'ĭal) *a.* [*L. vestigium* trace.] Small and imperfectly developed.

**vestitur** (vĕs'tĭtŭr) *n.* [*L. vestitus* garnished.] A body covering as of scales, feathers, etc.

**veterinary** (vĕt'ērĭn'ārĭ) *a.* [*L. veterinarius* part. beast of burden.] Pert. science and art of treating diseases of animals.

**vexilla**,—*Acc.* of vexillum.

**vexillary** vĕk'sĭl'ārĭ *a.* [*L. vexillum* standard.] Pert. vexillum, *appl.* type of imbricate acroclavation in which upper petal is folded over others vexillar.

**vexillate** (vĕk'sĭl'it) *a.* [*L. vexillum* standard.] Bearing vexillum.

**vexillum** (vĕk'sĭl'ĭtŭm) *n.* [*L. vexillum*, standard.] Standard or upper petal in papilionaceous flower vane of feather.

**via** (vĭ'ā, ā'ā) *n.* [*L. via*, way] A way or passage.

**viabl** (vĭ'ābl) *a.* [*F via* life.] Capable of living capable of developing and surviving parturition.

**vibraculum** (vĭbrāk'ŭlŭm) *n.* [*L. sudoraculum*, whip.] Modified whip-like avicularium for defensive purposes, in Polyzoa vibraculum.

**vibratil** (vĭb'rĭtĭl) *a.* [*L. vibrare*

to quiver] Oscillating *appl.* antennae of insects.

**vibratile** orpuscles,—corpuscles closely resembling sperms found in coelomic fluid of starfish.

**vibrioid** (vĭb'rĭōid) *a.* [*L. vibrare* to quiver Gk. *rides* like.] Like a vibrio a bacterium with thread-like appendages and a vibratory motion.

**vibrioid body**—a slender cylindrical body found in superficial cytoplasmic layer of certain algae and fungi.

**vibrissae** (vĭbrĭs'sē) *n.* [*L. vibrissae* nostril hair] A hair growing on nostril or face of animals, as whiskers of cat acting often as tactile organ feather at base of bill or around eye; one of paired bristles near upper angles of mouth cavity in Diptera.

**vicariation** (vĭ'kārĭ'āshŭn) *n.* [*L. vicarius* deputy] The separate occurrence of corresponding species, as reindeer and caribou in corresponding but separate environments.

**vicinism** (vĭ'sĭnĭz'm) *n.* [*L. vicinus* neighbour] Tendency to variation due to proximity of related forms.

**Vicq-d'Asyr** bundles of [*F Vicq d'Asyr* French comparative anatomist] The thalamomaxillary fasciculus.

**villi**,—*pl.* of villus

**villiform** (vĭl'ĭf'ŏrm) *a.* [*L. villus* shaggy hair *forma* shape.] Having form or appearance of villus *appl.* dentition.

**villous**, (vĭl'ŏs), villous (vĭl' ŏs) *a.* [*L. villus* shaggy hair] Pubescent; having villi or covered with villi.

**villus** (vĭl'ŏs) *n.* [*L. villus* shaggy hair] Trophonema or one of minute vascular processes on small intestine lining one of processes on chorion through which nourishment passes to embryo pectonian body *as* of arachnoid; invagination, into joint-cavity of synovial membrane fine straight process on epidermis of plants.

**vimen** (vĭ'mĕn) *n.* [*L. vimen*, oar] Long slender shoot or branch.

**vinculum** (vīng'kūlūm) *n* **vincula** (vīng'kūlā) *pl*. [*L. vinculum* bond.] Slender tendinous bands accessory connecting bands of fibres, as *vincula brevia* band uniting two main tendons of foot in birds, sternal region of ninth segment in *Lepidoptera*.

**viosterol** — irradiated ergosterol, vitamin D preparation influencing calcium and phosphorus assimilation.

**virescence** (vīrēs'ēns) *n*. [*L. virescere* to grow green.] Production of green colouring matter in petals instead of usual pigment.

**virgat** (vēr'gāt) *a*. [*L. virga* rod.] Rod-shaped.

**virgula** (ēr'gūlā) *n* [*L. virga* of *virge* rod.] A small rod, axis of graptolite a paired or bilobed structure or organ at anal sucker in certain trematodes.

**virus** (vī'rūs) *n* [*L. virus* poisonous liquid.] One of the nucleoprotein-like entities able to pass through bacteria-retaining filters having many characteristics of living organisms and recognised by their toxic pathogenic effects in plants and animals.

**viscera** (vis'ērā) *n. pl* [*L. viscera* bowels.] The internal organs contained in various cavities of body.

**visceral** (vis'ērāl) *a*. [*L. viscera* bowels] *Peri viscera* *appl* to numerous structures and organs.

**visceral arches**,—a series of arches developed in connection with mouth and pharynx.

**visceral clefts**,—a series of furrows = clefts in neck region between successive visceral arches.

**viscerocranium** (vis'ērōkrā'nīūm) *n* [*L. viscera*, bowels *cranium* skull.] *Visa and visceral arches of neurocranium*.

**visceromotor** (vis'ērōmō'tōr) *a* [*L. viscera* bowels *movere* to move] Carrying motor impulses to viscera.

**viscin** (vī'n) *n* [*L. viscum* mistletoe] Sticky substance obtained from various plants especially from berries of mistletoe  $C_4H_6O$

**viscosity** (viskōs'itī) *n* [*L. viscosus* viscous.] Internal friction in fluids due to adherence of particles to one another.

**visual purple**,—porphyropain, *hodopsin* *g.v*

**visual red**,—a retinal pigment noticed in the trench.

**visual violet**,—*iodopsin*, *g.v*

**visual white**—the product of visual yellow irradiated by ultra-violet rays.

**visual yellow**—a pigment formed by the action of light upon visual purple a retinal pigment in certain fish.

**vital capacity**—of lungs, the sum of complementary tidal and supplemental air.

**vital force**,—form of energy manifested in living phenomena when considered distinct from chemical, physical and mechanical forces *cf* *vital* *cf* *hormone*.

**vital functions**,—functions of body on which life depends.

**vitalism** (vī'talizm) *n*. [*L. vita*, life.] Belief of vitalists, that phenomena exhibited in living organisms are due to a special force distinct from physical and chemical forces.

**vitamins** (vī'tāminz) *n. pl* [*L. vita*, life *amendicarius* resinous gum.] Accessory food factors deficiency or excess of which causes disease *cf* deficiency diseases.

**vitellarium** (vī'ēlērīūm) *a*. [*L. vitellus* yolk.] A yolk gland in flatworms and many rotifers part of an ovariole.

**vitelligenous** (vī'ēl)jēnōs) *a*. [*L. vitellus* yolk *gignere* to beget.] Producing yolk *appl* cells in ovary of many insects also vitello-genous, vitellogene.

**vitellin** (vī'ēlīn) *n*. [*L. vitellus* yolk.] The phosphoprotein of egg-yolk *ovovitellin*; similar or related substance in seeds.

**vitelline** (vī'ēlēn) *a* [*L. vitellus* yolk.] *Peri* yolk, or yolk-producing organ *appl* artery vein, duct, gland membrane.

- vitelloduct** (vītē'ōdūkt) *n* [*L. vitellus* yolk; *ductus* led.] Albuminiferous canal, duct conveying vitellus from yolk gland into oviduct.
- vitellogen** (vītē'ōjēn) *n* [*L. vitellus* yolk *gignere* to produce.] Yolk gland vitellarium *q.v*
- vitellophage** (vītē'ōfāgə) *n. ph.* [*L. vitellus* yolk; *Gk. phagēin*, to eat.] Isolated cells forming hypoblast of crustacean and insect egg
- vitellose** (vītē'ōsə) *n* [*L. vitellus* yolk.] A substance formed in digestion of yolk.
- vitellus** (vītē'ōs) *n* [*L. vitellus* yolk.] Yolk of ovum or egg
- vitrella** (vītē'ōlā) *n.* [*L. vitreus* glassy.] A crystalline cone cell of an invertebrate eye.
- vitroedentine** (vīt'rēdēn'tīn) *n.* [*L. vitreus* glassy *dens* tooth.] A very hard variety of dentine also vitrodentine.
- vitreous** (vīt'ēōs) *a.* [*L. vitreus* glassy] Hyaline transparent *appt.* humour or body the clear jelly-like substance in inner chamber of eye.
- vitreum** (vīt'rēōn) *n.* [*L. vitreus* glassy] Vitreous humour of the eye vitina.
- vitrification** (vīt'rīfīk'āshēn) *n.* [*L. vitreus* glass *facere* to make.] Condition of cells or organisms instantaneously frozen but able to resume all vital activities on being thawed out.
- vitta** (vīt'ā) *n.* vittae (vīt'ē) *pl.* [*L. vitta*, band or fillet.] Oil receptacles in pericarp of Umbelliferae a longitudinal ridge in diatoms band of colour
- vivification** (vīt'vīfīk'āshēn) *n.* [*L. vivere* living *facere* to make.] One of series of changes in assimilation by which protoplasmic material which has been taken up by cell is able to exhibit phenomena of living protoplasm.
- viviparity** (vīt'vīp'ar'itē) *n* [*L. vivere* alive *parere* to beget.] Condition of bringing young forth alive or of

- multiplying by means of shoots or bulbils vivipary
- viviparous** (vīt'vīp'ar'ōs) *a.* [*L. vivere* living; *parere* to beget.] Bringing forth young alive of oviparous, ovoviviparous; germinating while still attached to parent plant exhibiting vivipary as certain tropical plants.
- vocal** (vō'kāl) *a.* [*L. vox* voice.] Pert voice or utterance of sounds.
- vocal cords**,—folds of mucous membrane projecting into larynx.
- volar** (vō'lār) *a.* [*L. vola* palm of hand.] Pert. palm of hand or sole of foot.
- Volkman's canals** [*A. H. Volkman* German physiologist] Simple canals piercing circumferential or pericortical lamellae of bone for blood vessels, and joining Haversian canal system.
- voltine** (vō'līn) [*It. volta*, time.] Pert number of broods in a year
- vol bi** (vōl'bi) *a.* [*L. volvere* to roll.] Twining spirally
- voluntary** (vōl'untārī) *a.* [*L. volens* will.] Subject to or regulated by the will *appt.* striped muscles and their action.
- volut** (vōlūt) *a.* [*L. volvere* to roll.] Rolled *||* spirally twisted.
- voluta** grains,—ribonucleic acid granules formed in cytoplasm and representing food-material which is absorbed by the nucleus in growth and formation of chromatin meta chromatic bodies.
- volution** (vōlūshēn) *n.* [*L. volvere* to roll] Spiral twist of shell or of cochlea.
- volva** (vōl'vā) [*L. volvere* wrapper] Thence enveloping the sporophore of some agarics velum universale or surrounding base of stipe.
- volvate** (vōl'vāt) *a.* [*L. volvere*, wrapper] Provided with volva.
- vomer** (vō'mēr) *n.* [*L. vomer* plough-share.] A bone in nasal region.
- vomerine** (vō'mērīn) *a.* [*L. vomer* plough-share.] Pert vomer *||* *pl.* teeth.

- vomer** (vō mēr'ōk zāl) *n.* [*L. vomer* ploughshare; *nasus* nose.] *Appl.* cartilage and organ in region of vomer and nasal cavity *cf.* Jacobson's cartilage and organ
- vomeropalatine** (vō mēr'pāl'ātin) *n.* [*L. vomer* ploughshare *palatum* palate.] Fused vomer and palatine in some Amphibia.
- von Baer's law** [*K. E. von Baer* German biologist]. Recapitulation theory *q.v.*
- vortex** (vōr'tēks) *n.* [*L. vortex* vortex.] Spiral arrangement of muscle fibres at apex of heart spiral arrangement of hairs.
- vulva** (vūl'vā) *n.* [*L. vulva* vulva.] The external female genitalia or pudendum rectus of third ventricle between columns of *f. mix* epigynum *q.v.*
- vulviform** (vūl'vī'fōrm) *n.* [*L. vulva*, vulva *forma* shape.] Like a cleft with projecting lips shaped like vulva.
- vulvouteri** *a.* (vūl'vō'tērī) *n.* [*L. vulva* vulva *uterus* womb] *Part* vulva and uterus.
- vulvovaginal** (vūl'vōvā'vālnl) *n.* [*L. vulva*, vulva *vagina*, sheath.] *Part* vulva and vagina.

## W

- Wallace's Line** [*A. R. Wallace* English naturalist]. Imaginary line, separating Australian and Oriental zoogeographical regions, between Bali and Lombok, between Celebes and Borneo, and then eastward of Philippines
- Wallerian degeneration** [*A. V. Waller* English physiologist]. Degeneration of nerve fibres following section, produced distally to the injury
- wandering cells**,—amoeboid cells of mesogloea cercaria migratory leucocytes of areolar tissue planocytes.
- wand ring** *f.* atting cells,—macrophages in connective tissue clasmatocytes histiocytes rhagocytic cells.

- Warburg's factor** [*O. Warburg* German physiologist]. A respiratory enzyme cytochrome oxidase intracellular oxidation catalyst.
- Warburg's yellow enzyme**—*see* yellow enzyme.
- warm-blooded**,—*appt.* animals which have a fairly high and constant temperature above that of surrounding medium homeothermal.
- warning colours**,—conspicuous colours assumed by many animals to warn off enemies.
- wart** (wōrt) *n.* [*A.S. wear* wart.] A dry excrescence formed on skin firm glandular protuberance; verruca.
- water cells**,—specialised cells in stomach of camel, for storage of fluid.
- water culture**,—experimental raising of plants in water to see effects of different nutrient solutions; *cf.* hydroponics.
- water-gland**,—structure in mesophyll of leaves regulating water excretion through stomata.
- water pore**—minute ciliated opening through actinal wall of disc of Antedon opening at apex of leaf-vein for excretion of water
- water stomata**,—pores on surfaces of leaves for excretion of water; hydathodes.
- water-tube**—ciliated branched tube connected with ring vessel and coelom or with gill-structures.
- water vascular system**,—system of canals circulating watery fluid throughout body of Echinodermata; also applied to excretory system of Platyhelminthes.
- wattle** (wōt'tl) *n.* [*M.E. wate* bag] Fleishy process under throat of cock or turkey and of certain reptiles tassel or ppendix colli barbel [*A.S. wate* interwoven twigs.] Acacia.
- wax** (wāks) *n.* [*A.S. weax* wax.] A substance soluble in fat solvents produced by plants to reduce transpiration, and by animals, as by bees in forming honeycomb.

wax-pocket,—one of the paired wax secreting glands on abdomen of worker bee.

W-chr mosome,—the X-chromosome when female is the heterozygous sex.

web (web) *n.* [A.S. *webe* web] Membrane stretching from toe to toe as in frog and swimming birds; vexillum network of threads spun by spiders.

Weberian apparatus [E. H. Weber German physiologist]. An apparatus found in Cypriniformes and including Weberian ossicles, chain of four small bones stretching on each side from a membranous fenestra of atrium to air-bladder.

Weber's law—Inference that within limits, equal relative differences between two stimuli of the same kind are equally perceptible.

Weber's line [M. J. Weber Dutch zoologist]. Imaginary line separating islands with preponderant Indo-Malayan fauna from those with preponderant Papuan fauna.

Weber's gun [M. J. Weber German anatomist]. Uterus masculinus, *q.v.*

wedge bones,—small infravertebral ossifications at junction of two vertebrae, ten present in lizards.

Weismannism (vis manism) *n.* [A. F. L. Weismann German biologist]. The teaching of Weismann in connection with evolution and heredity dealing chiefly with continuity of germ-plasm, and on transmissibility of acquired characters.

Weismann's gland,—ring gland *q.v.*

Wharton duct [T. Wharton Eng. fish anatomist]. The duct of the submaxillary gland submaxillary duct.

Wharton jelly—the gelatinous core of the umbilical cord.

whale organ,—locomotory ciliated ring or trochal disc f. Rotifera. specialised ciliated epithelial structure in buccal cavity of Cephalochorda.

white body—so-called optic gland f. molluscs a large soft body of unknown function.

white commissure,—anterior commissure, transverse band of white fibres forming floor of median ventral fissure f. spinal cord.

white matter—tracts of medullated fibres in brain and spinal cord.

white y likepne es—minute vesicles forming flask-shaped plug in centre of egg-yolk, and fine layers alternating with yellow yolk.

whorl (hwel) *n.* [A.S. *hworfen*, to turn.] The spiral turn or rotation of univalve shell circle of flowers, parts of flower or leaves, arising from one point verticill.

wilting coefficient,—percentage of moisture in soil when wilting takes place.

wind-fertilisation,—fertilisation of plants by pollen carried by wind wind-pollination, anemophily

wing (wing) *n.* [M.E. *weage* wing] One of two lateral petals in a papilionaceous flower; lateral expansion on many seeds any broad membranous expansion large lateral process of sphenoid forelimb modified for flying in pterodactyle, birds and bats flight organ of insects etc.

wing covers, —tectrices, *q.v.*

winged stem,—stem having photosynthetic expansions.

wing-pad,—undeveloped wing f. insect pupae.

wing petal,—lateral petal in papilionaceous flowers.

winter bud—dormant bud, protected by hard scales during winter

winter egg—egg of many fresh-water forms, provided with thick shell which preserves it as it lies quiescent during winter of summer egg

Wirsung duct [J. G. Wirsung Bavarian surgeon]. The main pancreatic duct.

wisdom teeth,—four molar teeth which complete permanent set in man, erupting late.

wolf tooth—a small premolar tooth at front of premolar series, occasionally present in horses.

Wolffian (vô'fian) *a.* [C F Wolff German embryologist]. *Appl.* certain structures first discovered by Wolff.

Wolffian body — embryonic mesonephros arising as a series of tubules.

Wolffian duct, — duct of mesonephros.

Wolffian ridges — ridges which appear on either side of middle line of early embryo, and upon which limb-buds are formed.

wood (wôod) *n.* [A.S. *weald* wood.] The hard substance of a tree stem xylem of vascular bundles.

wood vessel, — an element of tracheal tissue a long tubular structure formed by cell-fusion.

Woolner's tubercle [T Woolner British sculptor]. Darwinian tubercle *q.v.*

worker — non fertile female in a colony of social insects.

worm (wôrm) *n.* [A.S. *wyrme*, worm.] A general name of no scientific value used to designate any of the flatworms roundworms polychaetes or oligochaetes lytta, as of dog

Wormian bones [O Worm or Wormian Danish anatomist]. Sutural bones *q.v.*

wound cambium, — cambium forming protective tissue at site of an injury

wound hormones — substances produced in wounded cells said to act as stimulus to renewed growth near the wounds of traumatic.

w-substance — a pituitary hormone secreted by pars tuberalis and inducing contraction of chromatophores.

## X

xanthin : (zân'thîn) *n.* [Gk. *xanthos* yellow] A water-soluble yellow colouring matter of cell-sap.

xanthin (zân'thîn) *n.* [Gk. *xanthos* yellow] Yellow colouring matter in flowers.

xanthine (zân'thîn) *n.* [Gk. *xanthos* yellow] Dioxypurine found in

muscle, liver pancreas, urine; also in certain plants  $C_8H_4N_4O_2$

xanthocarpous (zân'thókár'pôs) *a.* [Gk. *xanthos* yellow; *karpós* fruit.] Having yellow fruits.

xanthodermic (zân'thódér'mík) *a.* [Gk. *xanthos* yellow *derma*, skin.] Having a yellowish skin.

xanthodont (zân'thódônt) *a.* [Gk. *xanthos* yellow *odous* tooth.] Having yellow-coloured incisors *appl.* certain rodents.

xantho ucite (zân'thóloo'sh) *n.* [Gk. *xanthos* yellow; *leukos* white.] Leucoplast of an etiolated plant

xantholeucophore (zân'thóloo'fôr) *n.* [Gk. *xanthos* yellow *leukos* white *phorêin*, to bear] Yellow pigment-bearing cell xanthophore *q.v.*

xanthophane (zân'thófan) *n.* [Gk. *xanthos* yellow *phaino*, to appear] A yellow chromophane.

xanthophyll (zân'thófil) *n.* [Gk. *xanthos* yellow *phyllon* leaf] A yellow colouring matter found in plastids, as in autumn leaves

lutein  $C_{40}H_{56}O_6$

xanthopous (zân'thópôs) *a.* [Gk. *xanthos* yellow *pous* foot.] Having a yellow stem.

xanthopsin (zân'thóp'sin) *n.* [Gk. *xanthos* yellow *opsis* sight.] Yellow pigment of insect eyes

visual yellow *q.v.*

xanthopterin (zân'thóp'térin) *n.* [Gk. *xanthos* yellow *pteron* wing] Yellow pigment of wing of lemon butterfly and of integument of wasps etc possibly precursor of anti-anæmia vitamin M  $C_{22}H_{30}O_6$

xanthosomes (zân'thósô'ms) *n. pl.* [Gk. *xanthos* yellow *soma* body] Amber-coloured excretory granules in foraminifera.

xanthosperme (zân'thósép'r'mô's) *a.* [Gk. *xanthos* yellow *sperma* seed.] Having yellow seeds.

**X bodies**,—protein-like inclusions in cells affected by a virus.

**X-chromosome**—sex-chromosome single in the heterogametic sex, paired in the homogametic sex.

**xenarthral** (xēn'arthrāl) *a.* [Gk. *xenos* strange *arthron*, joint.] Having additional articular facets on dorso-lumbar vertebrae.

**xenia** (xē'nīā) *n.* [Gk. *xenios* hospitable.] Appearances in seed, fruit or maternal tissues of char acters belonging to male parent.

**xenobiosis** (xēnōbīō'sis) *n.* [Gk. *xenos* hospitable; *bios* to live.] Hospitality in ant colonies.

**xenoeic** (xēn'ēik) *a.* [Gk. *xenos*, strange *eikos* house.] Living in the empty shell of another organism.

**xenogamy** (xēnōg'amī) *n.* [Gk. *xenos* strange *gamos* marriage.] Cross-fertilization.

**xenogenesis** (xēnōjēn'ōsis) *n.* [Gk. *xenos* strange; *genesis* descent.] Heterogenesis.

**xenogenous** (xēnōj'ōnīs) *a.* [Gk. *xenos* strange *gamos* descent.] Originating outside the organism; caused by external stimuli; exogenous.

**xenomorphosis** (xēnōmōr'ōsis) *n.* [Gk. *xenos* strange *morphosis* shaping] Heteromorphosis.

**xenophya** (xēn'ōfīā) *n.* *plu.* [Gk. *xenos* stranger; *physis* to grow] Foreign bodies deposited in inter spaces of certain Sarcodina, or used in formation of shells of certain protozoa; cf autophya.

**xenoplasti** (xēn'ōplā'stik) *a.* [Gk. *xenos* stranger *plastis* formed.] *Appl.* graft established in different host of heteroplastic.

**xerarch** (xēr'ark) *a.* [Gk. *xeros* dry *arche* beginning] *Appl.* series progressing from xeric towards mesic conditions.

**xeric** (xēr'ik) *a.* [Gk. *xeros* dry] Characterized by scanty supply of moisture; tolerating or adapted to arid conditions. *Opp.* hyric.

**xerochasy** (xēr'ōkāsī) *n.* [Gk. *xeros* dry *chasis* separation.]

Dehiscence of seed vessels when induced by aridity of hygrochasy

**xeromorphic** (xērōmōr'fik) *a.* [Gk. *xeros* dry; *morphe* form.] Structurally modified so as to retard transpiration; *appl.* characters of xerophytes.

**xerophilous** (xēr'ōfīlūs) *a.* [Gk. *xeros* dry *philein* to love.] Able to withstand drought *appl.* plants adapted to a limited water supply xerophil.

**xerophyte** (xēr'ōfīt) *n.* [Gk. *xeros* dry; *phyton* plant.] A xerophilous plant—plant growing in desert or alkaline or physiologically dry soil; a xerophil.

**xerophyton** (xēr'ōfītōn) *n.* [Gk. *xeros* dry; *phyton*, plant.] A plant inhabiting dry land.

**xeropolium** (xēr'ōpōl'ium) *n.* [Gk. *xeros* dry *pos*, grass.] Steppe vegetation.

**xerose** (xēr'ōsē) *n.* [Gk. *xeros* dry *L. serere* to put in a row] A plant succession originating on dry soil.

**xerotherm** (xēr'ōthērm) *n.* [Gk. *xeros* dry *thermos* heat.] A plant surviving in conditions of drought and heat.

**x-generation**,—gametophyte; *vs* sporophyte generation.

**xiphohumeralis** (xif'ithūmēr'ālis) *n.* [Gk. *xiphos* sword *L. humerus* shoulder] A muscle extending from xiphoid cartilage to humerus.

**xiphoplastron** (xif'itplā'strōn) *n.* [Gk. *xiphos* sword *F. plastron*, breast plate.] Fourth lateral plate in plastron of Chelonida.

**xiphistern** (xif'istēr'nūm) *n.* [Gk. *xiphos* sword *L. sternum*, breast bone.] The posterior segment or endiform process of sternum; metasternum.

**xiphoid** (xif'oid) *a.* [Gk. *xiphos* sword, *oides* shape.] Sword-shaped; endiform; xiphoid.

**xiphoid process**,—last segment of sternum xiphisternum; tall or telson of Limulus.



- xiphophyllous (xif'ðfil'is) *a.* [Gk. *xiphos* sword *phyllos* leaf] Having sword-shaped leaves.
- X-organ,—a small compact or sac-like secretory organ found on eye-stalk of certain Crustacea.
- xylary (xil'ari) *a.* [Gk. *xylon* wood.] *Part* xylem *appl* fibres procambium etc. xyletic.
- xylem (xil'em) *n.* [Gk. *xylon* wood.] Lignified portion of vascular bundle.
- xylem-canal—narrow tubular space replacing central xylem in demersed stem of some aquatic plants.
- xyl m-ray—ray = plate of xylem between two medullary rays.
- xylocarp (xil'okarp) *n.* [Gk. *xylon* wood *karpes* fruit.] A hard woody fruit.
- xylochrome (xil'okrom) *n.* [Gk. *xylon* wood *chroma* colour] Wood dye or pigment of tannin produced before death of wood-cells.
- xylogen (xil'ogen) *n.* [Gk. *xylon* wood *genes* producing] The forming wood in bundle lignin.
- xylet (xil'olk) *a.* [Gk. *xylon* wood.] *Part* xylem *appl* procambium that gives rise to xylem xylary
- xylold (xil'oid) *a.* [Gk. *xylon* wood *eidos* shape.] Woody or resembling wood in structure ligneous.
- xyl ma (xil'ma) *n.* [Gk. *xylon*, wood.] A hardened mass of mycelium which gives rise to spore-bearing structures in certain fungi a tree tumour
- xylophagous (xil'of'agus) *a.* [Gk. *xylon* wood *phagos* to eat.] Wood-eating *appl* certain molluscs, insects, fungi xylophilous.
- xylophyte (xil'ofit) *n.* [Gk. *xylon* wood *phytos* plant] A woody plant.
- xylostroma (xil'stro'ma) *n.* [Gk. *xylon* wood *stroma* bedding] The felt-like mycelium of certain wood-destroying fungi.
- xylotomous (xil'ot'omus) *a.* [Gk.

- xylon* wood *tomein* to cut]. Able to bore & cut wood
- X zone,—transitory region of inner adrenal cortex.

## Y

- yarovization,—jarovization vernalization, *q.v.*
- Y-cartilage—cartilage joining ilium ischium and pubes in the acetabulum.
- Y-chromosome,—the sex-chromosome which pairs with the X-chromosome in the heterogametic sex.
- yolk,—yolk.
- yellow body—corpus luteum.
- yellow cartilage—a cartilage with matrix pervaded by yellow or elastic connective tissue fibres.
- yellow cells—chloragogen cells surrounding gut of Annelids cells occurring in intestine of Turbellaria in Radiolaria, symbiotic algae or zoochlorellae zooxanthellae chromo-argentaffin cells.
- yellow enzyme—a combination of riboflavin protein and phosphoric acid essential in cellular respiration yellow oxidation catalyst cytochrome.
- yellow spot,—macula lutea of retina.
- Y-granules,—granules, microchemically allied to yolk found in male germ cells yolk granules.
- Y ligament,—diofemoral ligament
- yolk (yolk) *n.* [A.S. *geolere* yellow part] Inert, or non-formative nutrient material ovum vitellus yolk or greasy substance of Beece.
- yolk-duct,—vitelline duct.
- yolk-epithelium,—epithelium surrounding yolk-sac.
- yolk-gland,—a gland in connection with reproductive system by which egg is furnished with supply of food material vitellarium.
- yolk nucleus or vitelline body—cytoplasmic body appearing in ovarian egg Balbiani body or nucleus.
- yolk plates,—parallel lamella into which deutoplasm may be split present in amphibians and many fishes.

- yolk plug,—mass of yolk-cells filling up blastopore as in frog
- yolk-pyramids,—certain cells formed in segmenting egg of crayfish.
- yolk-sac,—membranous sac attached to embryo and containing yolk which passes to intestine through vitelline duct and acts as food for developing embryo.
- yolk-spherules,—remains of neighbouring cells or of pseudo-cells found in ovum.
- yolk-stalk,—a short stalk or strand containing ducts and connecting yolk-sac with embryo.
- ypsiliform (ypsiform) *a.* [Gk. Y upsilon *L. forme*, shape.] Y shaped *appl.* germinal spot at a certain stage in its development ypsiloid.
- ypseloid (ipseloid) *a.* [Gk. Y upsilon; *clasis* form.] Y-shaped *appl.* cartilage anterior to pube in salamanders, for attachment of muscles used in breathing hypseloid.
- Y shaped ligament of Bigelow—the Biofemoral ligament.

## Z

- zal maddodost (zalam daddost) *a.* [Gk. *za*, very; *hombda*, *λ* *adans* tooth.] *Appl.* insectivores with narrow molar teeth with V-shaped transverse ridges.
- Z-chromosome—the Y-chromosome when female is the heterozygous sex.
- Z-disc,—intermediate disc Krause's membrane Dobie line telophragma, plasmophore.
- zeaxanthin (z'axan'thin) *n.* [Gk. *see*, corn *xanthos* yellow] The yellow carotenoid pigment of maize or of yolk xanthophyll or lutein,  $C_{40}H_{56}O_6$ .
- zeta (z'et) *n.* [Ar *zifras* cipher] The origin of graduation.
- zeta, physiological,—point of adaptation to temperature.
- zeugopodium (z'epod'ium) *n.* [Gk. *zeugos* joined *podus* foot.] Forearm shank.
- Zinn, xonule of [J G Z *see* German anatomist]. Zon la cillaris.
- zooecia,—zoeta *g.p.*
- zoanthia (zōanthiā) *n.* [Gk. *zoōn* animal *anthos* flower] Type of zoanthid larva with transverse girdle of cilia.
- zoanthina (zōan'thinā) *n.* [Gk. *zoōn* animal *anthinos* of flowers.] Type of zoanthid larva with longitudinal band of cilia.
- zoarion (zōarion) *n.* [Dim of Gk. *zoōn* animal.] All the individuals of a polyzoon colony, a polypary
- zoophilous,—zoophilous, *g.p.*
- zoeta (zō'etā) [Gk. *see* life] Early larval form of certain decapod crustaceans.
- zoetiform (zō'etiform) [Gk. *see*, life *L. forme* shape.] Shaped like zoeta also zoetiform.
- zoecial zoecium,—see zooc-
- zoeti (zō'etik) *a.* [Gk. *see* life.] Of or *pert* life.
- zoe (zō'ik) *a.* [Gk. *zōikos* *pert* life.] Containing remains of organisms and their products, *appl.* *arctic*. [Gk. *zoōn*, animal.] *Pert.* animals animal life.
- zoid (zō'id) *n.* [Gk. *zoōn* animal *idion* *dim.*] A zoospore spore-zoite formed by division of sporoblasts of Haemosporidia.
- zooidogamic (zō'id'ogam'ik) *a.* [Gk. *zoōn*, animal *idion*, *dim.* *gamos* marriage.] *Appl.* plants fertilised by spermatozooids carried by water
- zooidogamy (zō'id'og'amī) *n.* [Gk. *zoōn*, animal *idion* *dim.* *gamos* marriage.] Fertilisation by motile spermatozooids or antherozoids.
- zoophore (zō'id'ofor) *n.* [Gk. *zoōn* animal; *idion*, *dim*; *phoros* to bear] A spore mother cell or sporoblast formed by segmentation of oocytes in Haemosporidia.
- zona (zō'nā) *n.* [Gk. *zoōn* *see* girdle.] A zone band, or area.
- zona arcuata,—inner part of beelzer membrane supporting spiral organ of Corti.
- zona fasciculata,—radially arranged columnar cells in suprarenal cortex below zona glomerulosa.

- zona glomerulosa**,—rounded groups of cells forming external layer of suprarenal cortex beneath capsule.  
**zona granulosa**,—granular zone around ovum in Graafian follicle, formed by cells of membrana granulosa discus proligerus.  
**zona pectinata**,—outer division of basilar membrane of cochlea.  
**zona pellucida**,—thick transparent membrane surrounding ovum  
**zona striata**.  
**zona radiata**,—radially striated inner egg-envelope, as in Polychaeta membrane with radially arranged pores receiving cell processes from corona radiata, *q.v.*  
**zona reticularis or reticulata**,—inner layer of suprarenal cortex.  
**zonal** (zō nāl) *a.* [*L. zonatus* *part* zone] Of or *pert* a zone.  
**zonal symmetry**—metamerism, *q.v.*  
**zonality** (zō nāl'itē) *n.* [*L. zona*, girdle.] Zonal distribution zonal character  
**zonal view**—view of diatom when the girdle is seen.  
**zonary** (zō nārē) *a.* [*L. zona* girdle] *Appl* placenta with villi arranged in a band or girdle.  
**zonate** (zō nāt) *a.* [*Gk. zona* girdle.] Zoned or marked with rings arranged in single row as some tetraspores  
**zonation** (zō nāl shō) *n.* [*L. zona* girdle] Arrangement or distribution in zones.  
**zon** (zōn) *a.* [*Gk. zona* girdle.] An area characterized by similar fauna or flora a belt or area to which certain species are limited stratum or set of beds characterized by typical fossil or set of fossils  
**zona** *r* region of the body  
**zonocillate** (zō nōsil'itē) *a.* [*Gk. zona* girdle *L. cilium* eyelash.] Banded with cilia, as certain annelid larvae.  
**zonoid** (zō'noid) *a.* [*Gk. zona* girdle *oides* form.] Like a zone.  
**zonolimnetic** (zō nōlimnē'tik) *a.* [*Gk. zona* girdle *limnos* pool.] Of or *pert* a certain zone in depth *appl* fresh-water plankton  
**zonoplacental** (zō nōplāstē'nāl) *a.* [*L. zona* girdle *placenta*, cake] Having a zonary placenta.  
**zonula ciliaris** (zō nūlā sil'iaris) *n.* [*L. zonula* dim. of *zona*, girdle; *cilium* eyelash] The hyaloid membrane forming suspensory ligament of lens of eye *zonule* of Zinn.  
**zonule** (zō nūl) *n.* [*L. zonula* dim. of *zona*, girdle.] A little zone belt or girdle *zonula*.  
**zoamyon** (zō'āmē'yōn) *n.* [*Gk. zōon*, animal *amylon*, starch.] Food reserve in refractile bodies of cytoplasm, as in protozoa paramyion, paraglycogen.  
**zoanthellae** (zō'ānthē'lē) *n. pl.* [*Gk. zōon* animal *anthos* flower] Cryptomonads symbiotic with certain marine protozoa.  
**zoopocric** (zō'ōpōk'rīstis) *n.* [*Gk. zōon* animal *apocricis* answer] The response of animals to their environmental conditions as a whole.  
**zoobiotic** (zō'ōbiō'tik) *a.* [*Gk. zōon* animal *bios* life.] Parasitic on an animal as some *fu* gl.  
**zoblast** (zō'ōblāst) *n.* [*Gk. zōon* animal *blastos* bud.] An animal cell.  
**zooecium** (zō'ōkiō'ēn) *n.* [*Gk. zōon* animal *oikos* stalk.] Zoodendrium.  
**zoochlorella** (zō'ōklorē'lē) *n. pl.* [*Gk. zōon* animal *chloros* green.] Symbiotic green algae living in various animals *g* in Sarcodina, Radiolaria, Hydra.  
**zoocoric** (zō'ōkō'rik) [*Gk. zōon* animal *choros*, to spread.] Dispersed by animals, *appl* plants.  
**zoocoenocyt** (zō'ōkō'nōsīt) *n.* [*Gk. zōon* animal *koenos* common *kytos* hollow] A coenocyt bearing cilia, in certain algae syn-zoospore  
**zoocyst** (zō'ōsīt) *n.* [*Gk. zōon* animal *kytos* sac] A porocyst  
**zoocytium** (zō'ōsīt'itē) [*Gk. zōon* animal *kytos* hollow] In certain Infusoria the common gelatinous and often branched matrix.

- zoodendrium (zō'ōdēn drīŭm) *n* [Gk. *zōon* animal *dendron* tree.] The tree-like branched stalk of certain colonial infusorians.
- oodynamics (zō'ōdīnām'īks) *n* [Gk. *zōon* animal *dynamics* power] The physiology of animals.
- zoocial (zōē'siāl) *a*. [Gk. *zōon* animal *oikos* house.] *Peri.* or resembling a zoocleum.
- zoocium (zōē'siŭm) *n*. [Gk. *zōon* animal *oikos* house.] A chamber or sac enclosing a polyzoan nutritive zooid.
- zoocerythrin (zō'ōērth rīn) *n*. [Gk. *zōon* animal *erythros* red.] Red pigment found in plumage of various birds.
- zoofulvin (zō'ōfūl vīn) *n*. [Gk. *zōon* animal; *L. fulvus* yellow] Yellow pigment found in plumage of various birds.
- zoogamet (zō'ōgāmēt) *n*. [Gk. *zōon* animal *gametes* spouse.] A motile gamete or planogamete.
- zoogamy (zōg'āmī) *n*. [Gk. *zōon* animal *gamos* marriage.] Sexual reproduction in animals.
- zoogeals (zō'ōjēn ōls) *n*. [Gk. *zōon* animal *genesis* descent.] The origin of animals ontogeny and phylogeny of animals.
- zoogeography (zō'ōjēg'ōgrāfī) *n*. [Gk. *zōon* animal *ge* earth *graphia*, to write.] The science of distribution of animals on th earth.
- zoogloea (zō'ōglē'ā) *n*. [Gk. *zōon*, animal *gleia*, glue.] A mass of bacteria embedded in mucilaginous matrix frequently forming an iridescent film ooglia.
- zoogonidium (zō'ōgonidīn ūm) *n* [Gk. *zōon* animal *gonos* off spring *zōon*, *zōon*. *gonos* vessel.] A cell which produces zoospores or zoogonidia, in algae.
- zoogonidium (zō'ōgonidī'ūm) *n*. [Gk. *zōon* animal *gonos* offspring *zōon*, *zōon*. *gonos* vessel.] One of motile spores formed in gonidium of algae.
- zoogenous (zōōg'ōnōs) *n*. [Gk. *zōon* animal *gonos* offspring] Viviparous.
- zooid (zō'oid) *n* [Gk. *zōon* animal

- oides* like.] A member of a compound animal organism an individual or person in a coelenterate or polyzoan colony posterior genital and non-sexual region formed in many polychaetes.
- zoolith (zō'ōlīth) *n*. [Gk. *zōon* animal; *lithos* stone.] A fossil animal.
- zoology (zōōl'ōjī) *n* [Gk. *zōon* animal *logos* discourse.] The science dealing with structure, functions, behaviour history classification, and distribution of animals.
- zōon (zō'ōm) *n*. [Gk. *zōon* animal.] Animals considered as an ecological unit.
- zoomorphosis (zō'ōmōr'ōsīs) *n* [Gk. *zōon* animal *morphosis* a forming] Formation of structures in plants owing to animal agents, as production of galls.
- zoön (zō'ōn) *n*. [Gk. *zōon*, animal.] An individual developed from an egg.
- zoocerythrin (zō'ōērth rīn) *n* [Gk. *zōon* animal *erythros* red.] Red lipochrome pigment found in various animals zoocerythrin, *zō*.
- zoönite (zō'ōnīt) *n* [Gk. *zōon* animal.] A body segment of an articulated animal.
- zoonomy (zōōn ōmī) *n*. [Gk. *zōon*, animal *nomos* law] The laws dealing with animal life.
- zoönosis (zōōn ōnōs) *n* [Gk. *zōon* animal *nosos* disease.] Animal disease zoonosis, disease produced by animal parasites.
- zoopherin,—nutritional factor X related t erythrotin vitamin B<sub>12</sub>
- zoophiloma (zōōf'īlōs) *n*. [Gk. *zōon* animal *philein*, to love.] *Appl.* plants adapted for pollination by animals other than insects.
- zoophobia (zōōf'ōb'ōs) *n*. [Gk. *zōon* animal *phobos* fear] Shunning or shunned by animals *appl.* plants protected by spines hairs secretions etc.
- zoophyt (zō ōfīt) *n*. [Gk. *zōon* animal; *phyton* plant.] An animal resembling a plant in appearance or growth.

zooplankton (zō'plāng'ktōn) *n.* [Gk. *zōon* animal; *plāngktēs* wandering] Animal plankton.  
 zooplasm (zō'oplāzm) *n.* [Gk. *zōon* animal; *plasma*, mould.] Living substance which depends on the products of other living organisms for nutritive material.  
 zoosperm (zō'zəp'ērēm) *n.* [Gk. *zōon* animal; *spermā*, seed.] A spermatozoid & zoospore.  
 zoosphere (zō'zōf'ēr) *n.* [Gk. *zōon* animal; *sphaira* globe.] Biciliate zoospore of algae.  
 zoosporangiothor (zō'zəp'ōr'ān'jōf'ēr) *n.* [Gk. *zōon* animal; *sphera* seed & *gyrtion* vessel; *sphera* bearing.] Structure bearing zoosporangia, as in mildew fungi.  
 zoosporangium (zō'zəp'ōr'ān'jūm) *n.* [Gk. *zōon* animal; *sphera* seed & *gyrtion* vessel.] A sporangium in which zoospores develop.  
 zoospore (zō'zəp'ōr) *n.* [Gk. *zōon* animal; *sphera* seed.] A swarm-cell flagellate or amoeboid in many protozoa; a motile protoplast in certain algae; swarm-spore of certain fungi.  
 zoosporocyst (zō'zəp'ōr'zōst) *n.* [Gk. *zōon* animal; *sphera* seed & *kystis* bladder.] Zoosporangium of certain saprophytic Phycomyces.  
 zoosterols (zō'zōst'ēr'ōl) *n. pl.* [Gk. *zōon* animal; *steros* solid & *oleum* oil.] Animal sterols cholesterol coprosterol etc.  
 zootaxy (zō'zōt'āk's) *n.* [Gk. *zōon* animal; *taxis* arrangement.] The classification of animals.  
 zootecnics (zō'zōt'ēniks) *n.* [Gk. *zōon* animal; *technē* craft.] Science applied to the art of breeding, rearing and utilizing animals; zootecny.  
 zooth cium,—zoocytrium, *q.v.*  
 zootherm (zō'zōth'ērēm) *n.* [Gk. *zōon* animal; *thermos* heat.] Any group of individuals in a living coral.  
 zootomy (zō'tōm'ī) *n.* [Gk. *zōon* animal; *temnō* to cut.] Dissection or anatomy of animals other than man.  
 zootoxin (zō'zōt'ōk'in) *n.* [Gk. *zōon*

animal; *toxikon* poison.] Toxin or poison produced by animals, as by toad snake bee.  
 zootrophic (zō'zōtrōf'ik) *a.* [Gk. *zōon* animal; *trophēin* to nourish.] Heterotrophic; holozoic, *q.v.*  
 zooxanthellae (zō'zōx'ānthēl'ē) *n. pl.* [Gk. *zōon* animal; *xanthos* yellow.] Yellow or brown cells or symbiotic unicellular algae living in various animals.  
 zooxanthin (zō'zōx'ānth'in) *n.* [Gk. *zōon* animal; *xanthos* yellow.] Yellow pigment found in plumage of certain birds.  
 zoogygosphere,—planogamete *q.v.*  
 zoogyg spore (zō'zōg'ēsp'ōr) *n.* [Gk. *zōon* animal; *zygon* yoke; *sphera* seed.] A motile zygo-spore.  
 Zuckerkandi's bodies [E. Zuckerbawd Austrian anatomist]. Chromaffin tissue or paraganglia lying on each side of foetal abdominal aorta; aortic bodies.  
 zygantrum (zīg'an'trūm) *n.* [Gk. *zygon* yoke; *antrum* cave.] A fovea on posterior surface of neural arch of vertebrae of snakes and certain lizards of zygonphene.  
 zygapophysals (zīg'āpōf'izis) *n.* [Gk. *zygon* yoke; *apophysis* process of bone.] One of processes of a vertebra by which it articulates with adjacent vertebrae.  
 zygobranchiate (zīg'zōbrān'jē'tē) *a.* [Gk. *zygon* yoke; *branchia* gills.] Having gills symmetrically placed and renal organs paired; *affl.* order of Gastropoda.  
 zygoecardia oesalices,—paired lateral oesacles in gastric mill of Crustacea.  
 zygod ctyl (zīg'zōd'āk'til) *a.* [Gk. *zygon* yoke; *dactylar* digit.] Having two toes pointing forward two backward, as in parrots.  
 zygod nt (zīg'zōd'ōm) *a.* [Gk. *zygon* yoke; *odous* tooth.] Having molar teeth in which the four tubercles are united in pairs.  
 zygon natic (zīg'zōg'ōn'ēf'ik) *a.* [Gk. *zygon* yoke; *gonis* origin.] Produced by fertilization *affl.* parthenogenetic; zygonetic.

**zygoid** (zī'gold) *n.* [Gk. *zygon* yoke *oides* form.] Diploid *appl.* parthenogenesis.

**zygolyala** (zīgōl'ish) *n.* [Gk. *zygon* yoke *lysis* loosening.] Separation of pair as of allelomorphs.

**zygoma** (zī'gō'mā) *n.* [Gk. *zygonos* yoke.] The bony arch of the cheek *arcus zygomaticus*.

**zygomatic** (zī'gōmāt'ik) *a.* [Gk. *zygonos* yoke.] Malar *part* *zygoma* *appl.* arch bone fovea, processes, muscle nerve.

**zygomaticofacial** (zī'gōmāt'ikōfā'shāl) *a.* [Gk. *zygonos* yoke *L. facies* face.] *Appl.* foramen on malar surface of zygomatic for passage of nerve and vessels *appl.* branch of zygomatic or temporomalar nerve.

**zygomaticotemporal** (zī'gōmāt'ikōtēm pōrāl) *a.* [Gk. *zygonos*, yoke; *L. templum* temples.] *Appl.* suture, foramen, nerve, etc. at temporal surface of zygomatic bone.

**zygomaticus**,—muscle from zygomatic bone t. angle of mouth

**zygmalous** (zī'gōmāl'ūs) *a.* [Gk. *zygon* yoke *mala* hmb.] Having paired appendages *appl.* fine *appl.* arygmalous.

**zygomite** (zī'gōmīt) *n.* [Gk. *zygon* yoke *mitis* thread.] One of pair of conjugated filaments.

**zygomorph** (zī'gōmōr'fik) **zygomorphous** (zī'gōmōr'fīs) *a.* [Gk. *zygon* yoke *morphē* shape.] Bilaterally symmetrical with only one plane of symmetry: monosymmetrical.

**zygonema** (zī'gōnē'mā) *n.* [Gk. *zygon* yoke *nema* thread.] Chromosome thread during anaphase or sygotene.

**zygonury** (zī'gōnū rī) *n.* [Gk. *zygon* yoke *neuron* nerve.] In certain Gastropods, having connective between pleural ganglion and ganglion on visceral branch of opposite side.

**zygophase** (zī'gōfāz) *n.* [Gk. *zygon*, yoke *phasis* aspect.] The diploid

phase of a life-cycle: diplophase of gamophase.

**zygophore** (zī'gōfōr) *n.* [Gk. *zygon*, yoke *phoros* to bear.] A conjugating hypha in certain fungi.

**zygophyte** (Y'gōft) *n.* [Gk. *zygon* yoke, *phylon* plant.] A plant with two similar reproductive cells which unite in fertilisation.

**zygopleural** (zī'gōplōor'al) *a.* [Gk. *zygon* yoke *pleuron* side.] Bilaterally symmetrical.

**zygopodium** (zī'gōpōd'itīm) *n.* [Gk. *zygon* yoke *pus* foot.] Forearm shank.

**zygois** (zīgō'sis) *n.* [Gk. *zygosis* joining.] Conjugation union of gametes.

**zygosome**—microchromosome, *q.v.*

**zygosperm** (zī'gōspēr'm) *n.* [Gk. *zygon*, yoke *sperma*, seed.] Zygopore.

**zygosphen** (zī'gōsfēn) *n.* [Gk. *zygon*, yoke *sphen* wedge.] An articular process on anterior surface of neural arch of vertebrae of snakes and certain lizards which fits into *zygantrum*.

**zygosphere**,—gamete, *q.v.*  
**zygosporangium** (zī'gōspōrān'jūm) *n.* [Gk. *zygon*, yoke; *spheros* seed *angion*, vessel.] A sporangium in which zygosporangia are formed.

**zygosporangium** (zī'gōspōr'jūm) *n.* [Gk. *zygon* yoke *spheros* seed.] A zygot cell, or resting spore, formed by conjugation of similar reproductive cells.

**zygosporophor** (zī'gōspōr'ōfōr) *n.* [Gk. *zygon* yoke *spheros* seed *phoros* to bear.] Zygophore, *q.v.* suspensor in Mucorineae.

**zygotaxis** (zī'gōtāk'sis) *n.* [Gk. *zygon* yoke *taxis* arrangement.] Tendency towards conjugation between two specialised hyphae in certain fungi *zygotactism* mutual attraction between gametes of the opposite sex.

**zygot** (zī'gōt) *n.* [Gk. *zygotis* yoked.] Cell formed by union of two gametes or reproductive cells fertilised ovum.

**zygotene** (zīg'ōtēn) *n.* [Gk. *zygon* yoke *telos* band.] Prophase stage of meiosis where spermatocyte threads are uniting in pairs pairing threads.

**zygote** (zīg'ōt'ē) *n.* [Gk. *zygos* yoked.] *Part.* a zygote *appt.* mutation occurring immediately after fertilization *appt.* a mber somatic *appt.* gamete number of chromosomes 2n.

**zygote blast** (zīg'ōt'ēblast) *n.* [Gk. *zygos* yoked *blastos* bud.] A sporozoite produced by segmentation of zygotomere in Haemamoebae.

**zygotoid** (zīg'ōt'oid) [Gk. *zygos* yoked *eidos* form.] Product of union of two gametoids as in mucori fungi.

**zygotomere** (zīg'ōt'ōmēr) *n.* [Gk. *zygos* yoked *meros* part.] A cell formed by segmentation of zygote in Haemamoebae.

**zygotonucleus** (zīg'ōt'ōnū'klēōs) *n.* [Gk. *zygos* yoked *L. nucleus* kernel.] A nucleus formed by fusion of two gametonuclei.

**zygotropism** (zīg'ōt'ropizm) *n.* [Gk. *zygon* yoke *trope* turn.] The growth of zygomorphs towards each other of zygotaxis.

**zygo oospore** (zīg'ōzō'ōspōr) *n.* [Gk. *zygon* yoke *oos* animal *spora* seed.] A motile cell formed by union of two similar cells.

**zymase** ('māz) *n.* [Gk. *zyme*

leaven.] A complex of enzymes occurring in plants and acting on sugars with production of carbon dioxide and alcohol.

**zymase** (zīm'āz) *n.* [Gk. *zyme* leaven.] An enzyme or ferment.

**zymocent** (zīm'ōkēnt) *n.* [Gk. *zyme* leaven *kentros* pole.] Rod-shaped chondriosome of a pancreatic cell.

**zymo-excitor** — *a* a balance activating a zymogen, *e.g.* hydrochloric acid, which activates pepsinogen.

**zymogen** (zīm'ōjēn) *n.* [Gk. *zyme* leaven *genes* producing.] A substance capable of being transformed into a ferment *Le* precursor of an enzyme proenzyme proferment a zymogenic organism.

**zymogenic** (zīm'ōjēn'ik) *a.* [Gk. *zyme* leaven *genes* producing.] Enzyme-producing *appt.* certain cells of gastric gland tubule *appt.* micro-organisms, as bacteria.

**zymolysis** (zīm'ōl'is) *n.* [Gk. *zyme* leaven *lysis* loosening.] Decomposition by the action of zymase.

**zymosis** (zīm'ōz'is) *n.* [Gk. *zyme* fermentation.] Fermentation reactions induced by an enzyme or enzymes.

**zymotic** (zīm'ōt'ik) *a.* [Gk. *zyme* causing fermentation.] *Part.* or caused by fermentation *appt.* diseases induced by infection.

